

Energy Saving Products Company - Energy-saving Products



ESE-ZSJ Injection Molding Machine Energy Saving System

System Features:

integrated structure

It is of energy-saving control system and protection system integration design. The product is designed for industry-specific application of injection molding machine, which has high integration, small size, balanced energy-saving function and bypass function. By selecting the switch, it can realize the shift from bypass to energy-saving which has high reliability. The equipment is delivered as a whole and is available for installation on the spot.

Professional Design

Focused on the technique process of using the injection molding machine, we start from hardware and software at the same time to develop energy saving functional module and improve dynamic response speed of the electrical effect system. Finally, it can realize rapid response of the oil pump machine and guarantee stable output while save the energy. According to its technique features and requirements, the injection molding machine energy saving system changes the output power of the oil pump and uses variable pump instead of traditional definite pump the at each injection molding stage to minimize the return flow of the overflow and reduce the noise and oil temperature of the pumps, which has a significant energy-saving effect.

Significant Energy Saving Effect

Based on the amount, a closed loop control system is formed by the pressure, which can distribute electrical energy in accordance with the working state and avoid the waste of excess low load power output. Compared with the traditional control system of definite pump injection molding machine, it has better energy saving effect. Currently, the power factor of the definite pump injection molding machine is 0.6—0.8. After ESE-ZSJ system transformation, it can reach 0.96 and above.

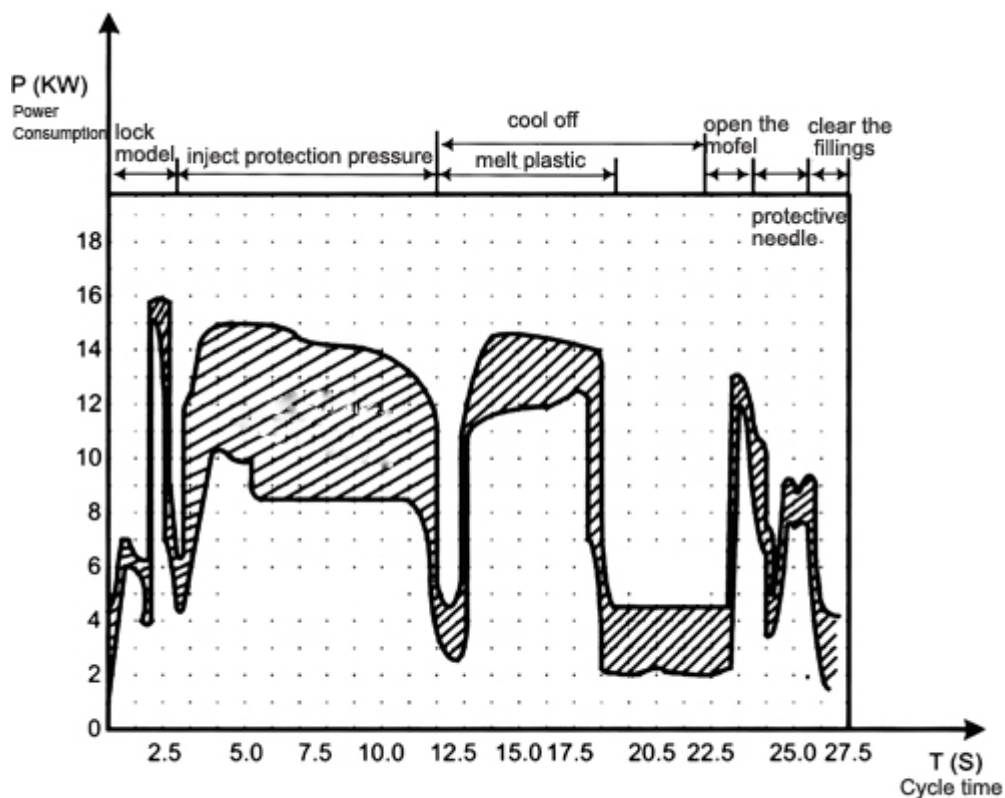
Soft start of the electrical motor

With the adoption of professional energy saving control software, the oil pump motor can realize smooth soft –start, which can eliminate the influence of the impact current, reduce the impact of the mechanical components, lower the noise, extend the maintenance cycle and life of the equipment. Meanwhile, it also can expand the capacity of the system.

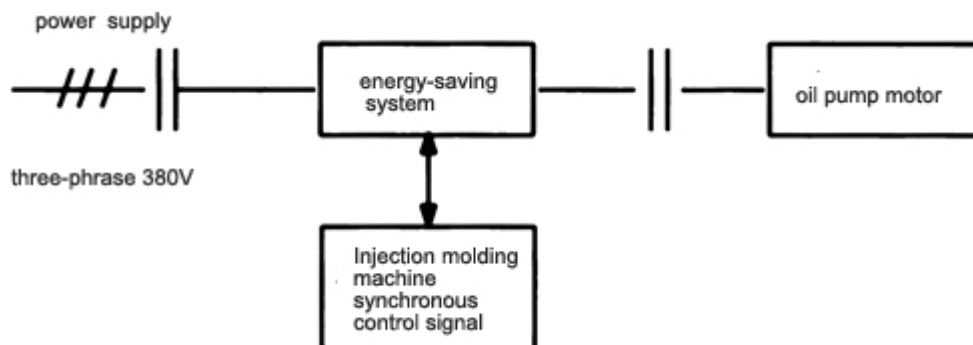
Energy Saving/Bypass Shift

The system can track the grid automatically. If the energy saving system breaks down, it can return to the bypass and realize smooth shift of energy saving/bypass to reduce impact without delaying the production.

Working Principle



—— City electric operation chart
 —— Electric-saving operation chart
 [Hatched Box] energy-saving effect



Technical Parameters

- Built-in power-saving function modules for injection molding machine the, closed-loop regulation
- automatic tracking and sampling, close monitoring of load changes.
- Optimized space vector, small harmonic current components, smooth operation and high efficiency.
- NC keyboard, multi-interface input methods, flexible control, convenient
- it has current limiting, over-voltage stall, pick-up braking, speed tracking, smooth restart and other functions.
- Improved protection function for short circuit, over current, overload, over-voltage failure.
- High-quality and low noise.