



# Energy Monitoring System Of Injection Molding Machine Can Save 28% ~ 60% Electricity

## Superb energy efficiency

1. With the use of an advanced micro-computer system, this machine changes the pump from a fixed capacity to a flexible one, thus achieving energy efficiency.
2. The hydraulic system within the injection molding machine is compatible with the power consumption level required by the original operation process, thus curtailing additional power usage to a minimum.
3. Overall energy saving rate reaches 28% ~ 60%.

## Great reliability

1. The original operation system and oil circuit are retained.
2. Monitored by advanced computer systems, this energy-saving machine promptly gives automatic alarm and lighting signals in the case of malfunctions, proving it to be highly safe and reliable.
3. Capable of operation using AC or in the energy-saving mode, thus preventing disruptions of the production process in case of malfunctions

## Soft start-up

1. Reduces vibration of the daylight opening, raising the durability of the equipment and modes..
2. Noise is strictly kept to a minimum.
3. Heat production by the system is obviously reduced. Oil temperature remains at a constant level. Over 30% of water usage is saved in the cooling process.
4. Lifespan of enclosed components is extended. Chances of malfunctions decrease greatly, thus saving considerable maintenance expenses.

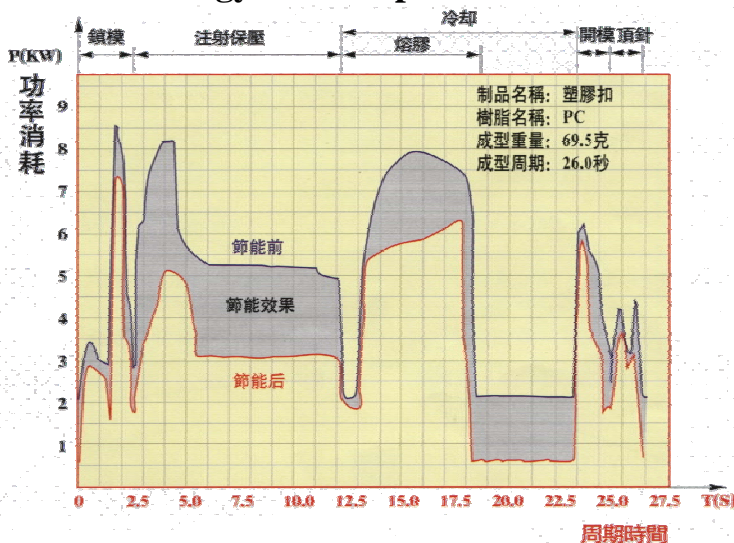
## Easy operation

Works with perfect synchronization with injection molding machines. No extra efforts are needed for adjustments.

## High profitability

Returns on all investments arise within the first 6-12 months from savings on energy use.

## Energy Consumption Contrast



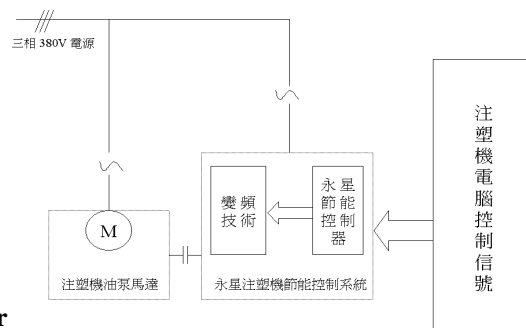
## Demension

Model	Applicable With JSW (EIII) Model	Injection Molding Machine Motor Power	Demension		
			H	W	D
WIN-022K	J150EIII	22 KW	1000	600	450
WIN-030K	J220EIII	30 KW	1000	600	450
WIN-045K	J280EIII~J350EIII	45 KW	1300	650	500
WIN-055K	J450EIII	55 KW	1300	650	500
WIN-075K	J550EIII~J650EIII	75 KW	1300	650	500

## The Energy Monitoring System

On the strength of its energy-saving features, the Win-Star Energy Monitoring System is capable to monitor the operating capacity of the oil pump motor within a diverse range of pressure and volume, in accordance with the requirements of the injection molding procedure, by detecting the pressure and volume of the injection molding machine.

- ※ The original Y-D circuit of the oil pump motor of the injection molding machine is retained.
- ※ The original **hydraulic** system and computer monitoring system of the injection molding machine remain unchanged.
- ※ Consistency of the pressure adjustment and the volume adjustment is guaranteed.
- ※ No extra efforts are need to adjust the Win-Star Energy Monitoring System when there is a change of mold or a change in the operational mode of the injection molding machine.
- ※ **The use of dual monitoring technique, comprising of a LED monitor and malfunction warning signals, guarantees that the system is under supervision at all times.**
- ※ The availability of both AC operational mode and energy-saving mode guarantees a smooth production process even in the case of malfunctions.



An array of energy monitoring systems are available to make sure you have the perfect system compatible with the motor power output of your injection molding machine.

Injection molding machines with motor power output at 75 kW or above and multi-pump motors are non- standardized products made upon clients' request..

The energy monitoring system is installed adjacent to the injection molding machine and can be tailor-made in accordance with your specific needs and requirements.

Please note that no further notice will be made should there be a change in the size of the energy monitoring system.

### Power-saving report for companies using Win Star Energy Monitoring Systems

Items	A Company	B Company
JSW Injection Molding Machine	J-550EII	J-300S
Win Star Energy Saving Machine	WIN-075K	WIN-045K
Power Output (kW)	75 kW	45 kW
Electricity consumed under AC operational mode(units/ hour)	25.12	17
Electricity consumed with the use of AC Power Adaptor(units/hour)	15.35	10
Power saved per hour	$25.12 - 15.35 = 9.77$	$17 - 10 = 7$
Power saved per day(22 hrs)	$9.77 \times 22 = 214.94$	$7 \times 22 = 154$
Power saved per month (25 days)	$214.94 \times 25 = 5,373.5$	$154 \times 25 = 3,850$
Power saved per year (12 months)	$5373.5 \times 12 = 64,482$	$3,850 \times 12 = 46,200$

### Calculations on energy efficiency of various motors used on Win Star Energy Monitoring Systems

Motor Power (kW)	AC Electricity Consumed per hr (approximate figures)	Electricity consumed by Win Star Energy Saving System per hr (approximate figures)	Energy saved per hour	Energy saved per day (24 hrs)	Energy saved per month (25 days)
22 kW	6.5	4	2.5	60	1500
30 kW	11	7	4	96	2400
45 kW	18	12	6	144	3600
55 kW	23	15	8	192	4800
75 kW	28	18	10	240	6000

## *Win-Star EQUIPMENT*

### **Win Star Equipment For Injection Molding Machine**

## *Single Extruder Machine*

### **Trait & Purpose :**

The entire piece of equipment is composed of a material processor, a stainless steel cold water tank and a granulator, applicable to plastic wastes and thin-walled molded products for granules production. Color mixture is allowed.



### **Parts Of Single Extruder Machine:**

1. Extruder .

- Screw diameter: 35mm
- Screw length ratio: 30:1
- Screw type: specialized screw( regular material)
- Power output: 5.5 kW
- Operation mode: AC operation
- Temperature-Modulated Sections: 3 sections
- ventilation Sections: 2 sections
- Production capacity reaches 20 kg per hour

2. A set of molds

3. 3 meters long stainless steel cold water tank

- Water tank frame x 1

4. A granulator

- Equipped with 25 cutters
- Power output: 105 kW
- Operation mode: AC operation

5. One 50 kg Mixer (Power output: 2 HP)