## Steam Z Case Study



# **Resin extruder**





In Resin pellets Extruders, **temperature stability** is a very important factor. If the temperature fluctuates, the viscosity of the resin changes, the size of pellets pushed out from the die becomes uneven, the length of the beards of the cuts also varies, and the number of defective products out of the standard size increases. At the time of the sieve, although the sizes are aligned, the customers are strict in demand for quality, and irregular size also occupies the top of the claim subject.

While the Extruder is often to use high pressure steam above 4 MPa, the conventional intermittent discharge type traps regardless of type, easily failure. A long period of time, it is non-stabilize the continuous temperature. Operation has always been in difficult.

### After replacing Steam · Z · · ·

There is no large temperature disturbance factors that failure is the cause of the trap, also to discharge drain is continuously disappear even hunting, the temperature is very high accuracy, it was a long period of time continuously stable.

#### (1) Initial stage of operation of defective products has decreased

In the early operating temperature to shorten the time to stabilize, the amount of defective products generated in the initial stage of operation is reduced significantly.

#### (2) The dispersion of the pellet size decreased

Since the viscosity of the dissolved resin was stabilized in proportion to the stabilization of the temperature, the distribution width of the pellet size was also significantly narrowed, and the yield of the standard size was greatly improved.

#### **③ Extreme durability**

Checking of the conventional steam traps were updated in 1 to 2 years from the viewpoint of temperature stability, but Steam  $\cdot$  Z has been continuously used without failure for more than 10 years.



