

# Measure resin viscosity via molding machines

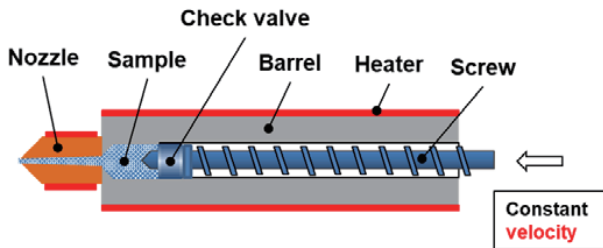
## A new item for quality control

### Resin viscosity automatic control program

#### **meltcon**®

#### Concept

- Control and adjust the resin melting condition from the viewpoint of resin viscosity which fluctuates due to environmental changes such as resin production lot, drying condition, content re-grind resin, and replacement the plasticizing parts of molding machines.
- Contribute to the improvement of the yield rate by managing the condition.
- Resin viscosity can be measured under the condition closer to actual molding.



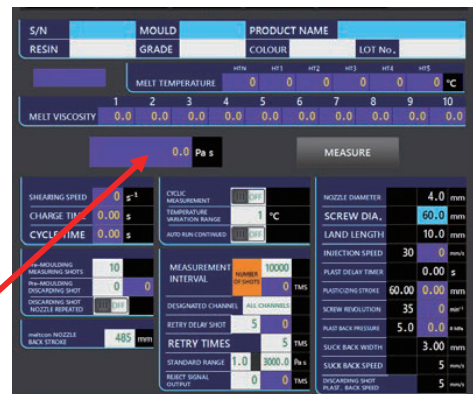
$$\eta = \frac{R^4 P}{32LD^2 V}$$

R: Nozzle land diameter [mm]  
 L: Nozzle land length [mm]  
 P: Injection pressure [MPa]  
 D: Screw diameter [mm]  
 V: Injection speed [mm/s]

#### Features

- If setting the resin viscosity for the acceptable quality standard in advance, the cylinder temperature is automatically adjusted to the value.
- The operator does not need to change the conditions each time the resin lot is changed.
- No need to replace any parts, just add the program.

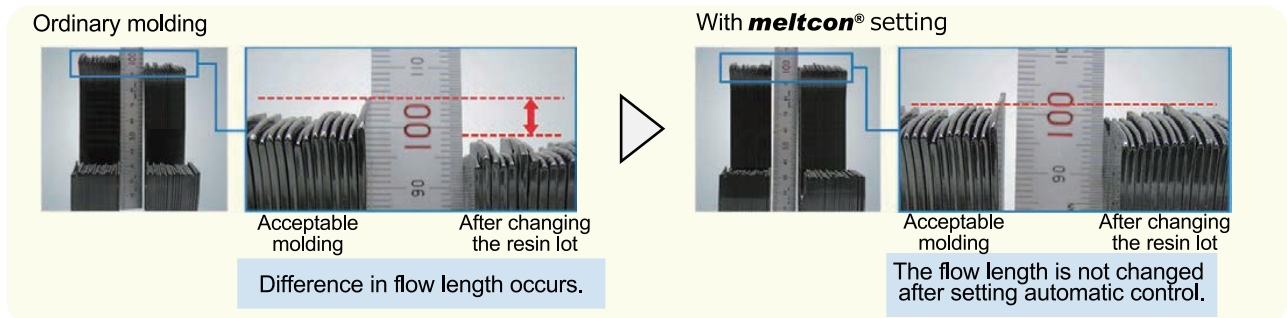
Measurement result



meltcon® Operation screen

#### Advantage

- Under the same condition as when molding a good quality product, change the resin to a different production lot and restart molding. Compare the flow length before and after the lot change.



[Molding: Bar-flow, Resin: PC]