

SYSCON PlantStar can monitor up to 50 process variables per machine (injection blow molding equipment), or auxiliary equipment. Here are some of the most common.

- Pressure: Peak, time-to-peak, back, hold
- Time: boost, hold, screw recovery, inject time, pack time, blow delay time, Blow time
- Temperature: barrel, hydraulic, oil and dryer
- Cushion
- Shot Size
- Screw Forward Time (Inject & Pack)
- Screw Rotate (Dosing Time)
- Mold Water Zones

By alerting our customers when these variables are out of control, we can provide the data they need to predict and avoid unplanned downtime and catastrophic failure of equipment.

Kelch gained control over downtime after implementing PlantStar process monitoring:

- **\$400,000 in savings within first 5 months – reduced internal and external corrective actions reports by 92%**
- A process engineer used process data to **reduce cycle time by 6 seconds**, this improvement is very significant when calculated over the span of a year.
- Predictive maintenance was improved as Kelch was able to use process variation to help predict screw failure.

Ball Plastics controlled catastrophic downtime and tool damage as result of using PlantStar:

- Ball Plastics was challenged by excessive tool repair due to lime build up in their water systems. PlantStar was used to notify them when temperature readings indicated that lime build up was impacting quality, cycle time, and would lead to extensive downtime.

Tucker Housewares used process monitoring to predict the replacement of check rings:

- To avoid machine and tool damage Tucker Housewares needed a solution to avoid back flow into the nozzles of their injection molding equipment. With pressure transducers in place PlantStar allowed Tucker Housewares to predict maintenance instead of suffering from extended downtime when backflow occurred

Russell-Stanley, an extrusion blow molder, used PlantStar to avoid hydraulic pump failure:

- While making 55-gallon containers Russell-Stanley identified when hydraulic pumps began to perform erratically, they became prepared to replace parts before a catastrophic failure took place.

Bamar Plastics used process monitoring to detect when parts got stuck in the mold cavity of their tools and to achieve lights out production:

- PlantStar enabled Bamar to take corrective action to prevent mold repair.
- As an automotive industry supplier quality is paramount for Bamar Plastics. PlantStar enabled Bamar to go lights out for nights and weekends due to process data that ensured acceptable quality part creation.

Becton Dickinson used PlantStar to gain control over material conditions:

- With dryers on shop floor mezzanines PlantStar was used to monitor temperature and dewpoint to alert Becton Dickinson of material moisture that led to increased downtime and poor part quality

A Pharmaceutical Blow Molding customer with 7 Plants used PlantStar to avoid machine downtime:

- One specific example was the real time process alerts on temperatures notified them of a heater band or controller problem before the issue became worthy of a machine shut down.

Cantex Incorporated used the PlantStar system to **reduce production costs by 22%**.

Hunter Industries added the equivalent **capacity of 13 machines** because of PlantStar installation **in less than 6 months**.

Stanley Engineered Fasteners **improved OEE by 30% after the first year** of utilizing PlantStar.

