



TOTAL BLOWMOLDER MANAGEMENT

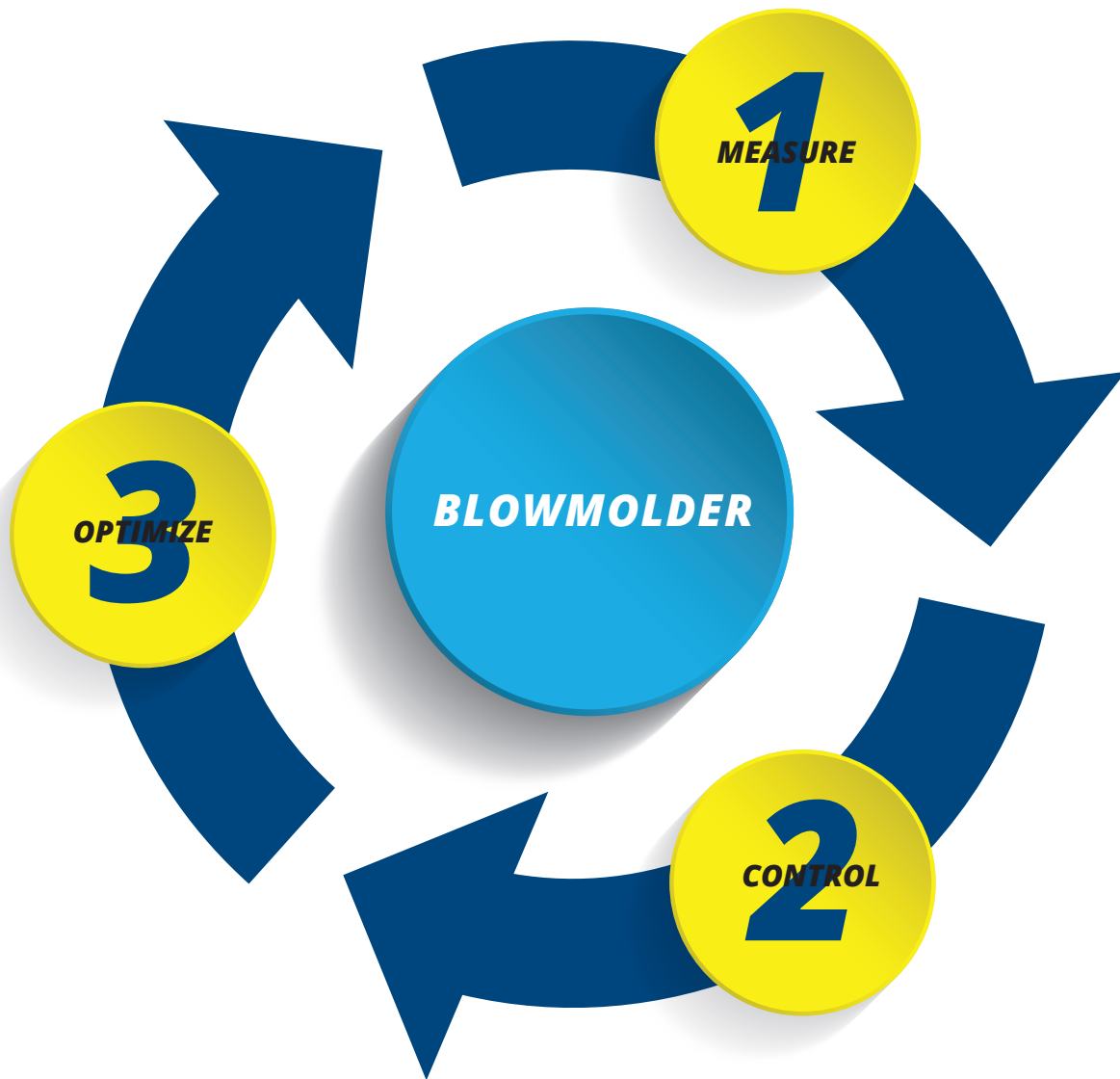
Pilot Family of Products



**IMPROVE PERFORMANCE, EFFICIENCY AND PROFITABILITY
IN THE PRODUCTION OF PET BOTTLES**

EXEPP0617

ENHANCED BLOWMOLDER MANAGEMENT IN THREE STEPS



The Process Pilot 3-step method offers a total process and quality management program for PET containers

This powerful combination of thickness distribution management, automated blowmolder control and process optimization, provides an unmatched set of tools that can significantly increase operational efficiencies on a 24/7 basis, while improving product quality and profitability.

Agr's patented Pilot Profiler measurement technology provides the means to monitor material distribution over the entire sidewall of every bottle, accurately and repeatedly. This is the first step in providing the feedback critical for closed-loop blowmolder operation.

With the addition of CrystalView, base characteristics can also be measured for effective material utilization.

MEASURE

MATERIAL DISTRIBUTION AND

PEARLESCENCE ON EVERY BOTTLE

WITH PILOT PROFILER® AND CRYSTALVIEW®



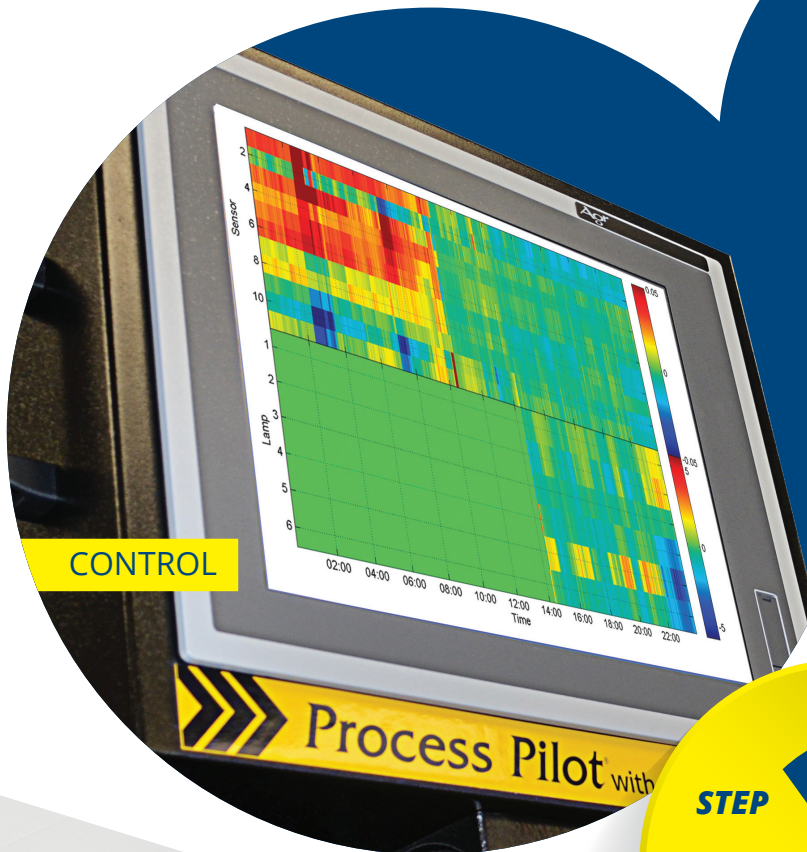
STEP

1



Measurement:
the foundation
for automated
control

Blowmolder
Control:
automated
management
for consistent
bottle quality



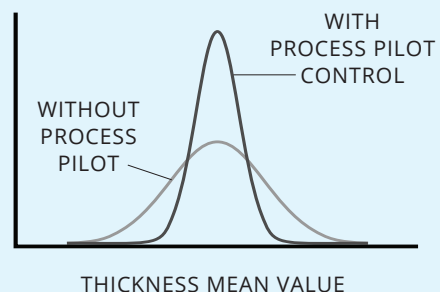
STEP

2

CONTROL

THE BLOWMOLDER WITH
PROCESS PILOT® TO OVERCOME
PROCESS VARIATION AND
MAINTAIN ON-TARGET
MATERIAL DISTRIBUTION

The Process Pilot automated control system manages the blowmolder to eliminate the process variables that impact bottle material distribution. Under Process Pilot control, the blowmolder is proactively adjusted, with minimal user intervention, to compensate for variations such as preform and material variability, plant environmental changes, operator experience and other related influences. This type of dynamic, real-time control is essential for producing light weight bottles.



OPTIMIZE

THE PROCESS AND PET BOTTLE PERFORMANCE PROPERTIES

Pilot enhancement tools provide the ability to optimize bottle production to a target that is most suitable for the product, application or operational goals—making it possible to efficiently customize and balance the best performing bottles with maximum profitability.

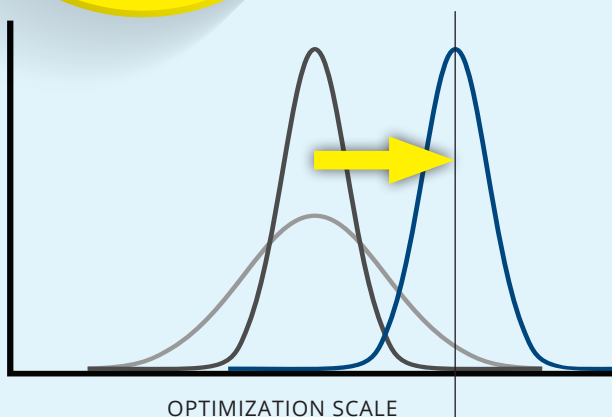
Targeted Optimization Areas possible with Process Pilot blowmolder management include:

- Material orientation to produce stronger, better bottles
- Improved shelf-life through focused material distribution and utilization
- Enhanced base and heel for stress crack performance
- Consistent production through optimized mold management
- Precise material management to maximize light weighting
- Expanded material and preform variability processing
- Energy savings through temperature, pressure and material optimization
- Profitability through efficient use of labor, energy and material

Optimization:
targeted production
to suit the product,
application
and business
objectives

STEP

3



TARGETED OPTIMIZATION AREAS

- ✓ ORIENTATION
- BASE
- MOLD
- PERMEATION
- MATERIAL
- ✓ PREFORMS
- ✓ STARTUP
- ENERGY
- ✓ PERFORMANCE

Get the most value from your blowmolding operation

Achieve consistency regardless of operator

Optimized Bottle Performance

Pilot optimization tools make it possible to create stronger, better performing containers through optimized material properties, while reducing energy costs and increasing yield and profitability

Process preforms of various conditions, age and source

Light Weighting with Confidence

Process Pilot makes it possible to aggressively light weight bottles, while providing the confidence that material is distributed appropriately

Downstream Performance

With Process Pilot, high quality and stable bottles are the norm. Downtime due to handling, filling, capping, and labeling operations can be significantly reduced, improving overall line productivity and efficiency

Reduce downstream jams and process issues plus improve palletization

Eliminate the need for lab measurements and section weight sampling