

COPILOT[®] SYSTEM RELEASE NOTES

Build No. v8.11.0



Overview

The CoPilot® system now features a Process Match Assistance tool that provides advice for correcting mold pressures when it does not match the template, to prevent excessive scrap from being produced and excessive machine down time, and a new function to calculate process ranges that account for normal process variation without need to expand Template Match process percentages. This release also features bug fixes for peak mold deflection calculation and velocity to pressure (V \rightarrow P) output triggering.

New Features Process Match Assistance

The Process Match Assistance feature, located on the Template Match Widget, provides advice for Process Technicians to correct mold pressures and material viscosity that do not match the template through systematic correction of process variables related to cavity filling, cavity packing, and cooling. When activated, the Process Match Assistance feature the widget selection buttons and menu will display a message and highlight the Template Match widget when the process is out of match if it is not already opened on the Job Dashboard. A Process Engineer can disable the Process Match Assistance for any mold.

The Process Match Assistance feature guides the Process Technician through general checks and a process stabilization period before advancing to providing advice on matching the loaded template. Once advice is complete, the Process Technician is required to enter a note including the username, the process problem, and problem description. Advice Notes are available to view on the Notes widget and Process Log in the CoPilot system, and on The Hub software Job Audit Report and Job Trends Notes. The referenced template values can be added and viewed on the Summary Graph.

If the Process Technician is unable to match the loaded template while using the Process Match Assistance advice, the CoPilot system will notify the user that a Process Engineer is required and advice will end to prevent a process from becoming too far off of template, causing excessive scrap from being produced and excessive machine down time.



New Features (continued)

Template Match Process Variation

The CoPilot system can now account for normal process variation and limit false alarms for molds and materials that have large variations from cycle-to-cycle; this prevents the need to widen the Template Match percentages. The Template Match widget calculates ranges for process values when a user selects the "calculate ranges" function on the widget and runs a stable process for at least 20 cycles. The number of cycles from which the ranges are calculated can be customized by the user to include a greater number of cycles.

Bug Fixes

Incorrect Peak Mold Deflection Calculation

When calculating the current cycle peak mold deflection value, the system incorrectly calculated the value at the end of the previous cycle.

Velocity to Pressure (V \rightarrow P) Transfer Not Triggered

When running a job with assigned first and second stage machine sequences and V \rightarrow P set points, the first stage sequence failed and the V \rightarrow P set points were reached but V \rightarrow P was not triggered.