

COPILOT® SYSTEM RELEASE NOTES Build No. v10.1.0



Overview

The CoPilot® system now features Integration Limits for users who require a different cycle calculation duration, a new location for temporary user notifications, Lynx Mold-Mount Mold Identifier ID/LX1-S support, Cycle Graph and Alarm Limits widget loading immediately upon job start, and several bug fixes.

New Features

Temporary Notifications Location

Temporary notifications are now displayed across the top left of the menu bar; temporary notifications are any user messages 1) that do not persist until acknowledged, and 2) do not require the user to follow a prompt.

Temporary notifications will queue and be shown consecutively in the menu bar.

Any notification that is not temporary will remain at the original viewing location (along the bottom of the display).

Lynx Mold Identifier ID/LX1-S Support

The CoPilot system now supports the use of the Lynx Mold Identifier ID/LX1-S, that is mold-mounted and allows molds without cavity pressure sensors to utilize mold identifying features of the system and prevent the selection of an incorrect mold file at job start.

- Connected ID/LX1-S are automatically assigned in the CoPilot system software during new mold setup.
- Connected ID/LX1-S can be manually assigned in the CoPilot system software to a pre-existing mold.



COPILOT® SYSTEM RELEASE NOTES

Build No. v10.1.0



Integration Limit Timing

Users are now able to select the desired integration limit for their application. An integration limit is when the CoPilot system completes alarm settings and summary data calculations for a cycle.

Typically, the CoPilot system uses the end of injection for the integration limit, but with certain applications it may be necessary to use a time before injection ends to compute data in order to negate a spike in cavity pressure later during injection that is not critical to part quality.

By default, the CoPilot system uses start of injection through end of injection for integration calculations.

Integration limits can now be set to the start of injection through the start of injection plus a time (in seconds) OR end of injection plus a time (in seconds).

The integration time affects the following summary variable calculations; all other summary variable calculations are unaffected:

- Peak End of Cavity, Post Gate, Mid Cavity
- Cycle Integral End of Cavity, Post Gate, Mid Cavity
- Fill and Pack Time for End of Cavity, Post Gate, Mid Cavity
- Fill and Pack Integral for End of Cavity, Post Gate, Mid Cavity

If the start of injection plus a time is longer than the injection time, summary variables will be computed at the start of injection plus a time.

If specified integration limit time does not occur before sorting time, integration limit time is calculated until sorting time.

Integration limits must be activated in Help>Diagnostics>Advanced Settings on the CoPilot system to appear on the Advanced Settings card on the Setup Dashboard.



COPILOT® SYSTEM RELEASE NOTES

Build No. v10.1.0



Improvements

Cycle Graph and Alarm Limits Widgets Load on Job Start

Users are now able to view the Cycle Graph immediately upon job start to choose or confirm the correct template is loaded, and the Alarm Limits widget to ensure the proper alarms are set prior to making parts.

Cycle Graph Auto-Scale

The Cycle Graph will now auto-scale cavity pressure to ignore high cavity pressure spikes that can occur when the ejector pin comes forward; cavity pressure curves will now be scaled based on the visible time, so that spikes are hid, but the curve is scaled to fit the available space.



COPILOT® SYSTEM RELEASE NOTES

Build No. v10.1.0



Bug Fixes

CoPilot System Crash After Persisting Composite Raw Buffers

When a job was stopped then started, or started then stopped, composite raw buffers sometimes persisted; the reuse of composite raw buffers sometimes caused there to be more data than time or time than data when iterating through the buffer, causing the system to crash.

CoPilot System and The Hub Software Disconnection

During the connection process, files sent by The Hub software to the CoPilot system were processed by the CoPilot system. During this processing the CoPilot system did not send replies back to The Hub software, causing The Hub software to see the connection as closed, and furthermore for The Hub software to disconnect from the CoPilot system.

eDART to CoPilot Templates

When converting a template from eDart to Copilot, the start of fill value wasn't converted properly, causing the template to be shifted.

Effective Viscosity Calculation

When a user without an assigned injection forward signal ran a process using the fill volume at cursor adjusted the fill location, the effective viscosity did not change, and fill time was not available on the Summary Graph.

Job Panel Not Selectable

When either of the two widgets located on the bottom of the screen are expanded to full screen view, the job panel became unselectable.

Max Failure After Machine Down

When utilizing Max and a Machine Down situation occurs, Max would not restart after the machine was started again.



COPILOT® SYSTEM RELEASE NOTES Build No. v10.1.0



Missing Job Dashboard Widgets

When a user navigated to the widget selection on the Job Dashboard, no widgets were available for selection.

Second Stage Failure Caused Hold Pressure Calculation Issues

When a job was running with first and second stage sequence signals assigned but the second stage sequence never occurred, it caused the hold pressure to be incorrect and for some variables to never be calculated.

Summary Variables Not Calculated

When a job was running some summary variables were not being calculated.

V→P Setpoints Not Removable

When a user added setpoints for $V\rightarrow P$, they were unable to remove the setpoints later.