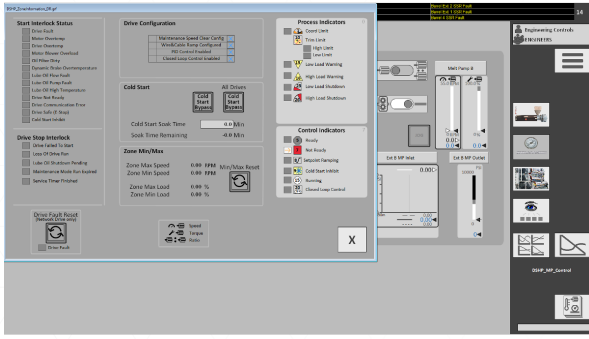
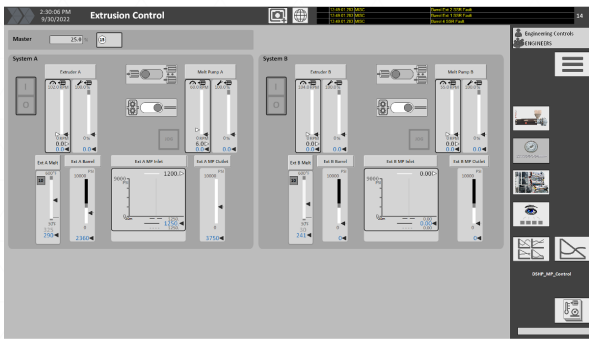
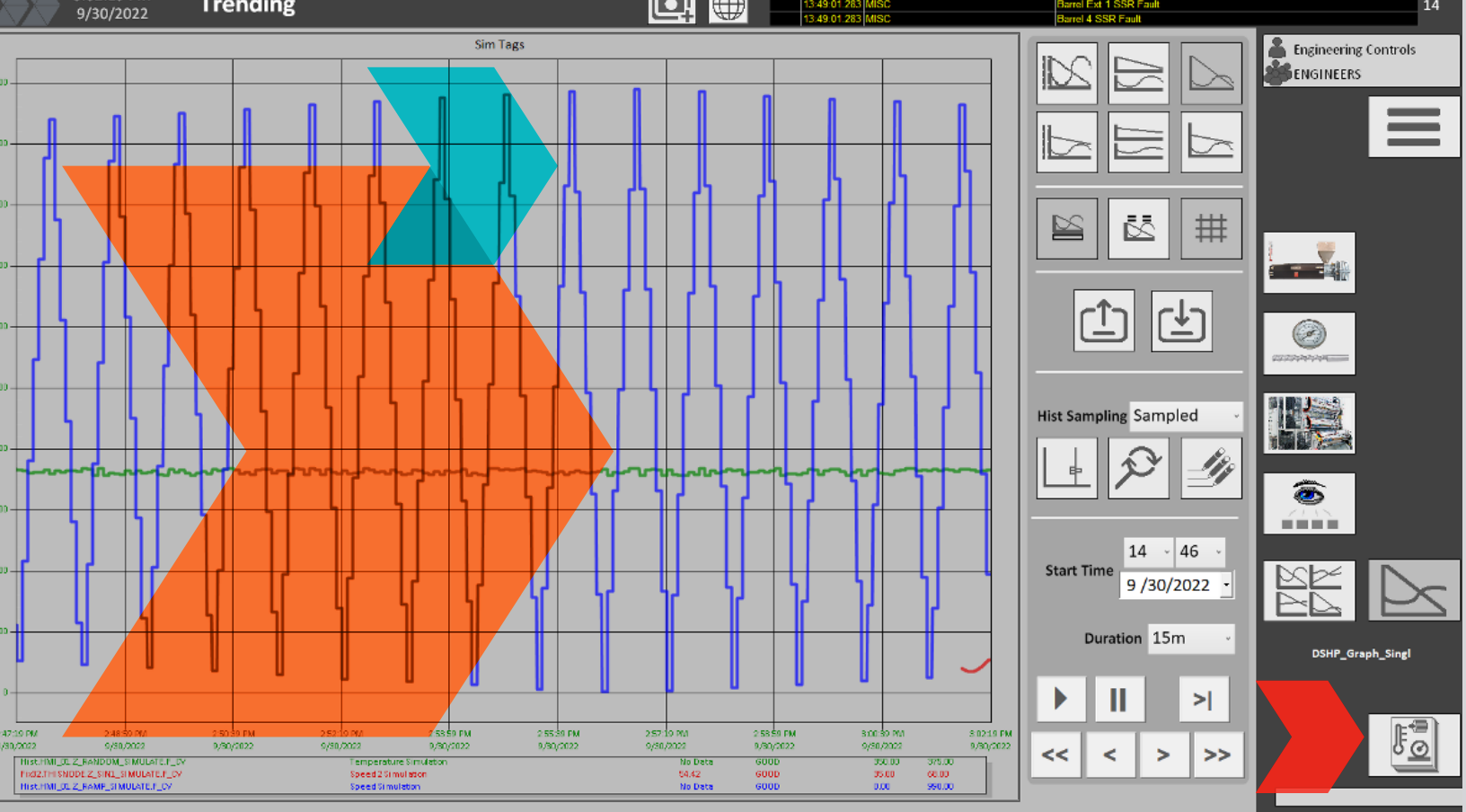


The screenshot displays the 'Extruder Temperatures' control interface. At the top, the time is 2:28:46 PM on 9/30/2022. The main window is titled 'Ext A Downstream' and shows a large graph of Temperature (0-300) vs. Time (1:58:50 PM to 2:28:47 PM). Below the graph are control panels for 'Zone A Brl Zone 5', including 'Control Toggle' (set to Enable), 'Manual Mode Toggle' (set to Manual), and various setpoints (Maximum: 325.0 °F, Minimum: 65.0 °F, Actual: 160.3 °F). A 'Process Indicators' list on the right shows various fault and status indicators, with 'Process Low' (15) and 'Process High' (16) being active. The bottom of the screen shows a row of temperature readouts for multiple zones, all showing 350 °F and 0%.

# EPIC IV® - Supervisory Control and Data Acquisition





Davis-Standard's EPIC IV® integrates a high performance HMI experience with supervisory control for complex systems. With Windows®-based plant management and extensive process control capabilities, the EPIC IV® can be customized for any extrusion or converting application. Supervisory features include alarm and event logging, customized real-time reports, SQC, historical trending, data collection, maintenance/troubleshooting help files, calibration, tuning, and more.

## Advantages

- *iFIX SCADA software for Windows®*
- *Premium connectivity solutions enable the EPIC to communicate with a wide variety of third party equipment.*
- *ControlLogix PLC platform standard*
- *Best-in-class historian software solution that collects, stores, and retrieves data efficiently and securely*
- *ReACT - Remote access for service and support - requires an Internet connection*
- *Multi-level security system to protect set-up functions and accessibility*
- *OPC UA server available for MES/ERP connectivity.*
- *Multi-Language support for global availability*
- *Adaptable and expandable touch-screen displays*
- *Machine KPI data clearly displayed on line overview and control screens that are customized to match the specific application*

## Main Menu

- Multiple levels of security access to protect critical set-up functions
- Operator entry to identify operator name, shift number, and production run data
- Access to traceability, maintenance, and troubleshooting features
- One click navigation to all key system features - Trending, Recipe, Reports, Alarming, Event log, etc.

## Line Overview

- Co-engineered with the customer and Davis-Standard to meet exact process requirements
- Provides a line status at a glance - key process data summary

## Temperature Control

- Pop-up keypad for setpoint entry also displays max, min, and current values.
- Ability to change multiple zones from one set point entry

## Line Control

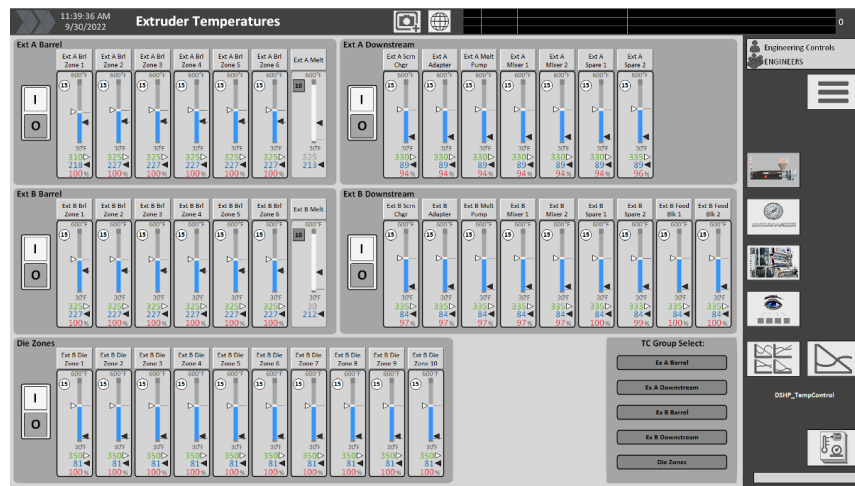
- Drive start/stop
- Drive speed / ratio / torque setpoint entry based on application requirements, uses similar keypad to Temperature Control
- Drive % load
- Drive coordination

## Recipe

- Provides process repeatability
- Automatic line set-up
- Expanded note capability - add comments
- User permissions determine ability to delete, edit, and save

## Alarm

- Status
- Logging
- Alarm summary page - Alarms can be sorted in a variety of ways - Tagname, Time In/Last, Acknowledge Time, Ascending, Descending, etc.
- New alarm pop-up banner appears on all active screens



## Trending

- Multiple pen plots - can view a single trend, or a (4) trend screen.
- Simple configuration - pre-configured tag filters help speed pen selection
- Dynamic chart zoom and pan
- Historical and real time

## SQC

- X
- Range
- Sigma
- Simple configuration
- Statistical trend alarms
- CPK calculating

## Event Logging

Log all system events:

- Set point changes
- Alarms
- Recipe name
- User

## Device Specific Pop-Up and Maintenance Screens

- Elevated user login has access to scaling, tuning, extra help screens
- Trend analysis for easier tuning of temperature or pressure

# EPIC IV® - Supervisory Control and Data Acquisition

## EPIC IV® Operator Station

Industrial PC with the following features and equipment:

- Intel® Core based processing power
- Windows® operating system
- SSD - Solid State Disk
- Low power 24 VDC operation
- Extended temperature range eliminates the need for an air conditioner
- UPS for automatic system shut down after an extended power loss to prevent data corruption
- Color touch-screen monitor
- Printer is optional
- GbE Ethernet, USB 2.0/3.0, and Serial ports are available to support the connectivity solutions

## EPIC IV® Process Controller

- Programmable Logic Controller (PLC) standard hardware:
- Chassis based I/O rack
- High performance process automation controller
- Power supply
- Analog input/output modules (as required)
- Discrete input/output modules (as required)
- Type J thermocouple input module(s)
- “Modular” process control software application, expertly applied to every project.

## OPTIONS

- Serial communications with selected equipment
- Network connections (native Ethernet/IP) for distributed I/O and third party equipment
- Safety rated processor and I/O to support safety over wire