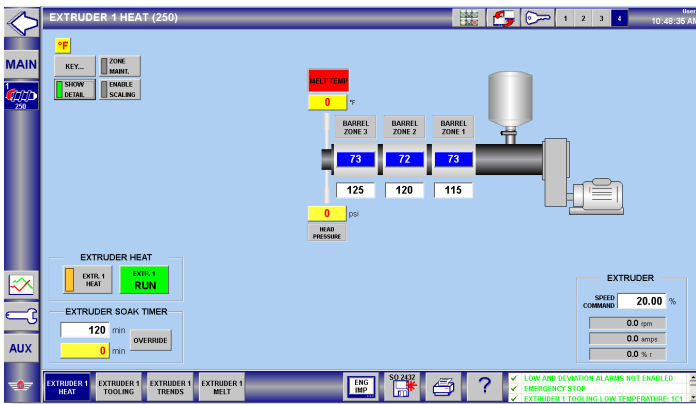# American Kuhne XC100 Navigator®
Extruder Controls

American Kuhne XC100 Navigator® control system

This system offers the power & functionality of our Navigator® control system in a streamlined replacement of discrete controls for operation of a stand-alone extruder. Operator control is achieved via a panel mounted HMI touch panel with integrated push buttons & e-stop. The system offers intuitive navigation, easy to understand graphical display of controls, statuses, & alarms along with integrated machine documentation.

Monitor and Control Functionality:

- Closed loop barrel PID heat/cool control
- Configuration for die zone control (up to 5 zones)
- Clamp & die zone control
- Heater burn-out detection/alarms
- High temperature alarms
- Low melt pressure monitor with dual alarms
- High pressure shutdown
- Melt temperature monitor
- Soak timer/cold start interlock
- Hour meter
- 7 day timer
- Extruder screw speed control
  (start/stop, speed display, amp display)
- Alarm & event history, 365 days
- Security access manager
- Recipe manager
- Trending of any parameters that are monitored
  & controlled (charts + report)
- Remote diagnostics
- Integrated, real-time I/O diagnostics

Option:

- Heater current monitoring
- Closed loop feedthroat cooling
- OPC UA Server

ULTRA Extruder with 15.6" panel mounted touchscreen

Hardware and Software:

- 15.6" Beckhoff wide-screen touch display
- Panel mount
- Beckhoff Industrial PC & I/O
- Power back-up
- Ultra high speed real-time Ethernet field bus system
  (EtherCAT)
- InduSoft HMI software