American Kuhne XC300 Navigator® Extrusion System Controls

American Kuhne XC300 Navigator® control system

The system offers the full power & functionality of our Navigator® control system for a multiple component extrusion system. The HMI is via a swing-arm mounted screen map with integrated hard-wired Estop, Start, Stop, & Reset pushbuttons along with USB port, mouse & keyboard control of the industrial PC. Capable of a complete range of monitoring, control & diagnostics for each component of the extrusion line. The system offers intuitive navigation, easy to understand graphical display of controls, statuses & alarms along with integrated machine documentation.

Monitor and Control Functionality:

- Feed throat temperature control
- Closed loop barrel PID heat/cool control
- Clamp & die zone control
- Heater burn-out detection/alarm
- High temperature alarm
- Heater current monitoring
- 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)
- Torque monitoring/torque limiting
- Puller/cutter control
- Air pressure control
- Vacuum sizing tank control
- Interface to OD/WALL measurement system
- Alarm history, 365 days
- Security access manager
- Recipe manager
- Trending of any parameters that are monitored & controlled
- Remote diagnostics
- On-line documentation
- Integrated, real-time I/O diagnostics

Hardware and Software:

- 21” Beckhoff wide-screen touch display
- Articulating swing arm mount
- Beckhoff Industrial PC & I/O
- Fully integrated safety I/O
- Power back-up
- Ultra high speed real-time Ethernet field bus system (EtherCAT)
- Thin client/WEB connection
- InduSoft HMI software
- TwinCAT Scope View charting & analysis tool
- OPC UA Interface
- Electronic signatures
- FDA 21 CFR Part 11

Options:

- Melt pressure control
- Melt pump control