NAVIGATOR 3000

COMPLETE PLASTIC INJECTION AND AUTOMATION CONTROLLER

The Navigator 3000 from Livingston & Haven is a highly integrated solution that combines an open controls architecture with the best in class components to provide a complete plastic injection and automation controller package. This controller package provides world-class performance and superior controllability of all aspects of your machine and automated cell, while offering the flexibility of future enhancements.

The Navigator 3000 expertly combines the following products:

- True real time closed loop clamp and injection control
- Lower total cost of owership by “off the shelf” hardware and future proof software
- Reduced costs by maximizing uptime, minimizing scrap, increased performance, and improved process monitoring
- Leverage existing investment modernizing to 21st century standards
- End user configureable, modifiable and expandable
- Digital temperature control with auto tuning and detection of burnout/runaway
- Enterprise connectivity with OPC compatibility (Networking/Internet)
- Real time local and remote diagnostics with notification and historical logging

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BENEFITS

NAVIGATOR 3000

Save Setup and Profile Adjustment Time

- High performance, closed-loop injection velocity and pressure regulation control
- High response ejector profile with multiple stroke and variable stroke capability
- Control structure specifically designed for hydraulic axis makes control so repeatable that precise setup of desired profile is achievable.
- Full featured “Recipe” function reduces set up time for mold changes and allows for multiple part profile storage and retrieval via easy to use screen interface

Reduced Costs

- Controls up to three proportional valves simultaneously
- Cutting-edge performance for old and new injection molding machine minimizes scrap by making the injection process repeatable
- Leaks due to hydraulic shock are eliminated in all normal operating conditions due to precise control of hydraulic conditions within the system

Improve Process Control

- Injection profile and setup options to allow total control of the most demanding injection applications
- Repeatable transfer from a mold fill velocity profile into a pressure profile based on cylinder position or pressure, or mold cavity pressure, or any external event
- Multiple steps for mold fill, hold pressure, and recovery pressure profiles
- Shot size and screw decompression control
- Profile the part ejector with either open or closed-loop velocity using multiple forward velocities and acceleration control
- Ejector profile includes tip stroke and high-speed, multiple stroke options

Increase Flexibility

- Replaces any PLC, or custom controller and interfaces with most popular I/O families
- Configuration options to any type of proportionally controlled hydraulic circuit, including one and two valve type injection circuits and hydraulic, toggle, or hydromechanical clamp circuits
- Operators or maintenance personnel have instant graphical access to critical machine parameters for on the fly process adjustment

Improve Process Monitoring

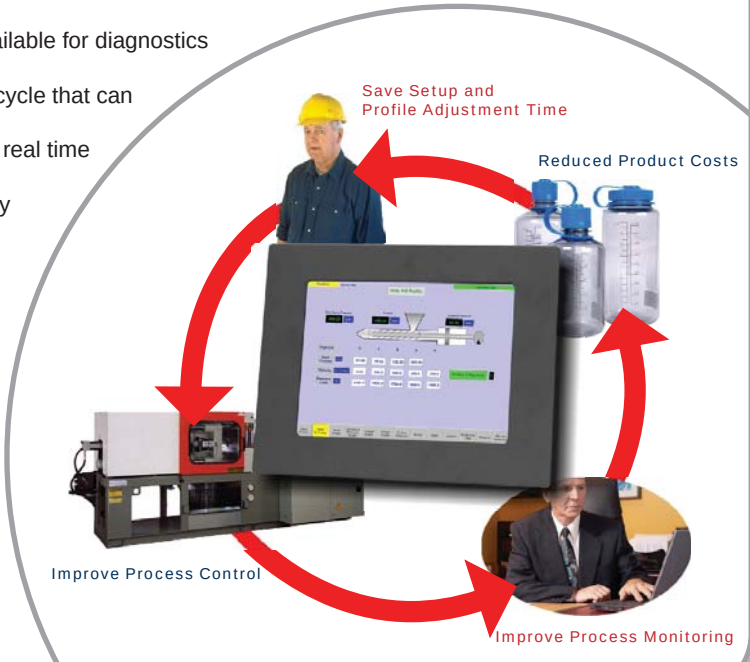
- All injection and clamp feedback parameters are displayed and available for diagnostics and logging
- Includes acquisition and storage of critical process data during the cycle that can be used for accurate process monitoring
- Built in Ethernet allows for remote access to the automation control real time and historic data
- Process variables can be monitored and modified locally or remotely

Reduced Cycle Time

- Specialized control techniques for hydraulic systems outperform generic machine controllers, making setup easier, smoother and repeatable
- Ready access to all process parameters facilitates ease of fine tuning the process for maximum throughput and quality
- Real time operating system on Intel processor provides high speed code evaluation, combined with Windows XP Pro for high resolution graphics and real world interface

Ease of Maintenance and Diagnostics

- Modern graphical screens provide monitor of all machine I/O
- Open easy to follow flow chart control programming, no proprietary code for machine control
- Flexible upgrades or additions to machine control. Robot, loader/unloader and other automation can be easily added without “factory” modified code



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