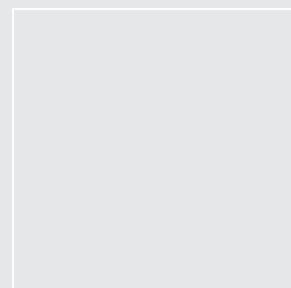


New Operating and Control Concept for Textile Machines with MFD-Titan



The continuous pressure to develop innovative products and reduce prices, as well as increased demands with regard to the operation and control of machines force textile machine manufacturers to be constantly on the lookout for new ideas.



Maschinenfabrik Herbert Meyer GmbH, one of the leading manufacturers of textile machines, can now meet these challenges with Moeller's new MFD-Titan multi-function display.

MFD-Titan is a product of the next automation generation, that combines PLC and visualization functions in one device. Only one software is required for the control, visualization and networking functions, thus considerably reducing the time required for engineering and programming.

In order to satisfy customer requirements in the operation and control of the new generation of fusing machines, Maschinenfabrik Herbert Meyer GmbH decided to use the new MFD-Titan multi-function display from Moeller. A high level of operator friendliness can be provided for the machine thanks to the fully-fledged graphic display and a customized user interface design. Four controllers for two temperature controls, one pressure and one speed control, and an activation function for a frequency converter were also required. MFD-Titan can not only fully meet these requirements but can also master special closed-loop control functions without restriction, such as pulse width modulation for controlling heating circuits.

Customised marking

The external marking of the display and operator unit can also be designed by customers themselves. In this way, a machine manufacturer can not only use a unique logo, but can also provide specific inscriptions for precise operator guidance: in addition to a company name or other identification mark, all the integrated buttons and the two status LEDs can be provided with markings for the device concerned.

User-friendly visualization

The visualization function allows users to create masks, for which the MFD provides a number of tools and display elements that can be assigned different attributes. Possible

elements include static texts, message texts, graphics, numerical value or date displays in different formats, value inputs or bit displays. The variable attributes that can be assigned to an element range from "visible", "invisible", "flashing", "static" to "inverse display".

The text management supports multi-lingual displays. The Mask Overview allows several language areas to be stored in which static texts and message texts can be entered and called. This form of language management is a mark of any fully developed visualization system.

The capability of the Button Editor and Mask Control also reduces the configuration required for the automation task, since visualization and control are implemented on the same hardware and software platform. In this way, all the variables of the control device are directly available for visualization and can be used for controlling display elements, for outputs and for data inputs. Value input does not require the use of the integrated control device but uses configuration windows to set the step width and other attributes for data entry and value display.

Not programming but parameterisation

The MFD-Titan multi-function display features an integrated easy control device called "easy-inside". The core of this is an easy800 with an extended range of function blocks such as PID controllers, signal smoothing and pulse width modulation function blocks and many more. The processor allows 32-bit operations. The cycle time can be set to the shortest possible time, to fixed values between 1...1000 ms or by the software. A number of variables can be used as the cycle time setpoint. In this way, machine builders are armed with a wide range of solutions for complex closed-loop control tasks.

Simple networking and expansion

The compact MFD-Titan belongs to the easy800 series with which it can be combined and expanded without any problems.

Users simply fit the easy modules on the side. MFD-Titan can be remotely expanded via easyLink, and a complete network can be set up using easyNet. This therefore provides a wide range of expansion options: The MFD control concept includes interfaces for Profibus DP, CANopen or DeviceNet for communication with devices from other vendors.

The machine controls can therefore be integrated in a suitable communication network as well as providing data exchange with a higher-level system.

One software is enough

The easySoft-Pro software is a complete package: it enables users to create the control software, assign parameters to the function blocks used, configure the visualization interface, all masks and button functions and finally configure the entire project including the networking. As if that isn't enough, the software also offers functions for simulating the control program, documenting the project, and also for establishing communication between the PC and the controller. The user therefore only requires one software package and one interface on the computer in order to cover all the functions required. If other control devices are connected to the easyNet, all devices can be addressed and loaded with programs as required from one device.

Conclusion

Meyer presented the new upgraded machine series on the market together with innovative fixing machines. A number of improvements could be implemented thanks to MFD-Titan. The new control concept not only increases reliability but also simplifies operation. All functions can be set intuitively at the same time and readjusted if required – on one ergonomically designed and generously sized operator interface.

Moeller GmbH
Hein-Moeller-Straße 7–11
53115 Bonn
Fax (0228) 602-2275
info@moeller.net

MOELLER 

Think future. Switch to green