TKonnect 4.0 from SATINAL: a new concept of fully intuitive user interface combined with cutting-edge technology

Today's industrial sectors are ever more connected, facilitating not only the work being carried out, but also enabling to check, observe and interact with the systems remotely. This article presents Satinal's most recent development in remote control and assistance, guaranteeing additional safety and improving daily jobs.

TRACEABILITY, REMOTE CONTROL, QUALITY AND REMOTE TECHNICAL ASSISTANCE

The TKonnect 4.0 remote system from Satinal allows to follow the production process of TK Glass Machinery via Smartphone or computer, no matter how far away from your factory you are. The new software connects TK Glass Machinery controllers safely to the internet, combining a new concept of fully intuitive user interface with the latest technology available.

The high-resolution display provides operators with process state in one view, including set-points and other important process data, making operations as easy as possible.

TK Glass Machinery can be accessed from all over the world thanks to the integrated web browser, enabling process data recovery, event reading, as well as machine configuration, programming and control. This allows to access machinery from everywhere (by any internet browser) without the need of any software. The new system can also measure actual power consumption, allowing to keep production costs under control.

Moreover, TKonnect 4.0 also allows to monitor production lines with the swipe of a finger: thanks to the smartphone app plant operations can be observed in real time from smartphones, guaranteeing additional safety and exponentially improving daily jobs.

TKONNECT 4.0 MAIN FUNCTIONS

Remote process control

With the password-encrypted secured access through Bluetooth technology and internet connection, TKonnect 4.0 allows real time monitoring of the production cycle and machinery control via smartphone, using the free mobile app, or by computer using any internet browser.

The machine status and outputs are shown in real time on a display through an Intuitive User Interface, that also enable continuous process supervisory and real time alarm notification.

TKonnect 4.0 promotes energy saving: the adaptive controller with continuous auto tune automatically regulates the power required by the machine, guaranteeing a homogeneous heating without any waste of energy.

Data analysis

TKonnect 4.0 creates real time reports of the production cycle and energy consumptions, measuring the actual power and analyzing the absorbed electricity in order to ensure better awareness and control of production costs.

Other analyses provided by the TK software:

- Error tracking and recording
- Self-validation of all relevant components
- Viewing KPI and alarm records
- Accessing machine statistics reports
- Email alerts on defined deviations and much more

Process traceability

TKonnect 4.0 easily enhances a tracking system of the components used during glass processing, making it easy to read.
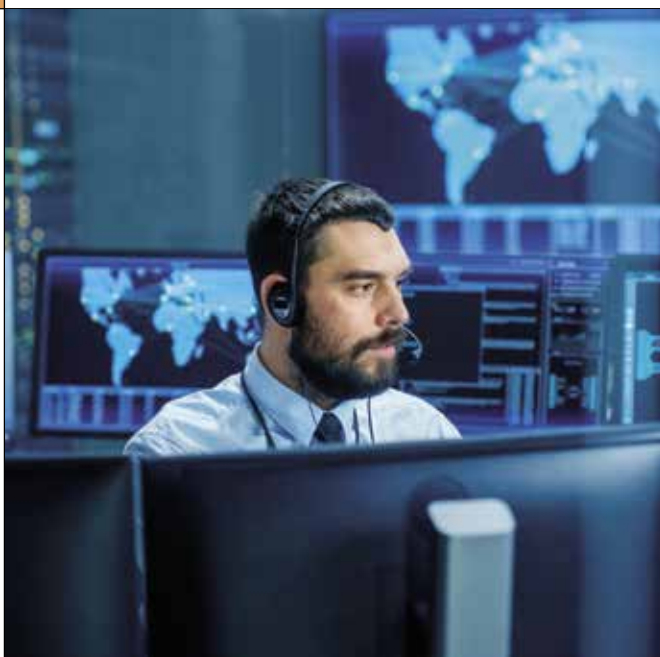
In addition, it allows to:

- Trace and register the glass thickness and Interlayer roll batch number
- Register up to 99 programmes available with options to assign user-defined names
- Provide detailed information for error tracking and recording with self-validation of all relevant components
- Export the process data in CVS or Excel formats, through Bluetooth and internet connection, to facilitate process traceability

Remote technical assistance

- Hassle-free remote H24 technical service from Satinal team
- Access machinery from everywhere (by any internet browser) without the need of any software
- Data Connection-Download production

reports over the Internet from any type of device in CSV and Excel format This latest innovation is based on a powerful microprocessor-based controller for continuous process supervisory and continuous auto tune. The new innovative TKonnect 4.0 system enables fully flexible programme profiles, actual power measurement and energy consumption, Email alerts on defined deviations and much more.

TK SOFTWARE – LATEST FEATURES

Automatic Program Start or Completion: Real-Time-Clock Programming: automatically start and stop TK Glass Machinery to be on temperature at shift start and turned off for the weekend.

Data Connection: Bluetooth data link and process data export in CSV and Excel format.

Smartphone Access: Watch one or more controllers via Web; Smartphone App for iOS & Android.

Internet Connectivity: Integrated Web Browser to access TK Glass Machinery from everywhere for retrieving log data, reading out event log, configuration, programming and control, remote technical assistance and much more.

MULTI-ZONE KILN OPERATION

TKonnect 4.0 controls the multi zone functioning of the oven, with electrically isolated inputs to ensure temperature equalization throughout the entire heating chamber. This process is controlled by a complex algorithm that ensures the zones are on same temperature, considering heat movements between the zones and avoiding lower temperature spots.