

TQR3000 — Electroplating Control System Continuously improved on the basis of leading technology and customer requirements, TQR3000 is currently the most flexible and reliable control system on the market.

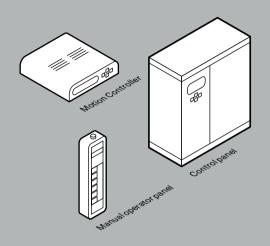
Designed as a complete control system consisting of hardware and software, the concept offers a comprehensive and maintenancefriendly system from sensor to visualisation.

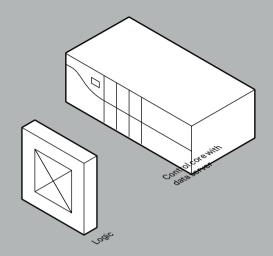






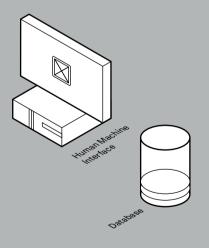
System control with TQR logic





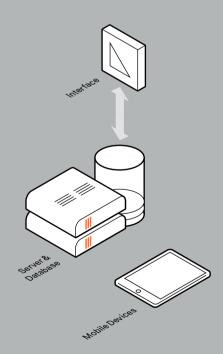


System operation – data logging



4.0

Smart Factory



TQR3000 software is an application designed for Microsoft Windows that is linked to a relational database. Developed and continuously expanded by Vonesco, it is designed specifically for handling surface treatment processes in the electroplating industry. The software stands out through intuitive and flexible order and article management. After a brief period of training, users can monitor the relevant production system parameters and intervene in the event of a problem. The software also features a reporting function that documents and archives the manufacturing processes of the produced parts. This is appreciated by many customers for reasons of traceability and quality assurance.

Everything at a glance

Major parameters such as process times, temperatures, workflow, error messages, flightbars and transporter movements are displayed in real time and can be adapted at any given time via an overview window.

From loading to storage, from pre-treatment to main process: every flightbar process is always recognisable and can be adjusted during operation as and when necessary.

System dialogue

Clearly structured information and operation windows provide information on the system's operating status, the movement of goods, vibrations, rectifier data and much more. Additional information can be integrated on request.

The conditions of different bath components are displayed comprehensibly using colours and animation. Specific values such as drip times and temperature tolerance can also be entered.

Availability

A user-friendly timer makes it possible to switch various components such as heaters on and off at specific times. This make it possible to process goods carriers loaded in the evening during a ghost shift in the early morning by automatically activating the treatment process in production to have the finished goods ready for unloading by the morning shift.

Article management

A specific programme and treatment data can be written and entered for every article in the system. All processes and articles can be changed at any time. Statistics assure continuous process optimisation.

Reporting

Data can be exported to Excel or forwarded via the intranet for fast and efficient statistical evaluation. This makes it possible to exploit the entire potential of a graphic display system.

Networked within the company

Users with administrator rights can monitor the system from the office, create articles and workflows, track articles in statistical evaluations and share the information with others. All system data is stored in the database and held available for an extended time period. It is also possible to link the company network to the system network to connect TQR3000 to existing superordinate control, product management and tracking systems. Why not use a small investment to create a lot of added value? Many older systems and production machines all over the world were designed and procured for the markets as they were at the time. The current market and the products it demands are constantly changing, and with this the systems. It is usually necessary to acquire a new machine or plant to manufacture these goods. It is, however, frequently the case that the system's hardware is generally well maintained and in keeping with the state of technology. The problem is often due to the control system and outdated components that are often no longer available. The risk of a prolonged outage is significant.

Retrofit

Vonesco therefore specialises in converting equipment and control systems all over the world. Vonesco can provide an end-to-end conversion package including planning, control cabinet construction, programming, delivery on location, conversion, commissioning and handover. Equipment and control system conversion goes hand in hand with many benefits:

- Minimisation of the risk of a system outage
- Use of the latest control technology and control components
- Highly flexible control functions to optimise throughput and production
- Small investment equals much added value
- Improved automation, traceability and inclusion in the quality management system
- System maintenance

Installation

We are often able to create other, as yet unrealised, added value during conversion alongside implementing the demands on the control system. Vonesco con provide the customer with comprehensive advice to lead the equipment and control system into the next generation. A conversion can comprise many different areas:

- Replacement of the current control system / replacement of the entire control system cabinet
- Expansion of the system or its technology / integration of new processes in the system
- Replacement of system components / sensors / wiring
- Integration of an ERP system / QA system / traceability system / RFID

Responsibility

Machine standstill time and conversion time are extremely important aspects of any conversion. We give this aspect the consideration it deserves through our long-standing experience in equipment and system conversion and are well aware that standstill times must be kept as low as possible. Our experienced specialists plan the conversion down to the smallest detail together with the customer to enable the shortest possible conversion times. Vonesco adopts responsibility for conversions planned in great detail to guarantee the start of production on the scheduled date.

New Life

Plant control systems are often characterised by their degree of customisation – the majority are developed for a specific process. The choice of control system supplier therefore demands considerable consideration as it can be the start of a long- standing relationship.	Installations	The best options for optimum support need to be considered early on during installation. Vonesco can make a valuable contribution by utilising the latest proven technology during installation. Our technicians are responsible for wiring and then checking the system and its associated network. Our team accompanies the customer during commissioning and optimises the processes along the way. Commissioning also includes acceptance testing and test reports that are drawn up and shared with the customer. Our commissioning team has years of experience and carries out commissioning projects in many different fields around the world.
In this day and age, it is essential to adapt to continuously changing markets and technology. It is hugely important to minimise the time	Remote Maintenance	Machine and equipment maintenance via a remote system is now indispensable. Vonesco therefore utilises the latest tools to develop a highly efficient remote maintenance system in cooperation with the customer. Our remote maintenance team takes care of any problems and adjustment requests around the clock.
allocated to maintenance	Training	Using and operating a control system correctly is

Training Using and operating a control system correctly is an important aspect. We therefore offer a range of training modules for our products. These are available in our training facilities in Steinmaur or Bangkok, but also directly on site at the customer's premises.

Repair & Service Our service and repair department takes care of every aspect of system repair and service work. Various service models are available, as well as service agreements that we can recommend to customers to ensure every disruption is handled quickly and efficiently.

Support

windows yet still avoid

are so important.

companion for life.

production down times.

That is why control system

support and maintenance

The control system is a

Your partner for complex control systems

Vonesco Control AG Gewerbestrasse 6 8162 Steinmaur Schweiz

T: +41 (0)44 855 6633 M: info@vonesco.com www.vonesco.com