CCC Emulator

CCC Emulator is the simple tool for designing, tuning and testing turbomachinery control with process simulation and directly transfer outcome to site control system to reduce commissioning time and risks.

Overview



eedback

Overview

Designed to meet the requirements of multi-purpose dynamic simulators and operator training stations, the CCC Emulator is the simple tool for designing, tuning and testing turbomachinery control in simulation and directly transfer outcome to site control system. When you choose the CCC Emulator, our engineers become more integral members of your design team — conducting design review, fine-tuning and final simulation reviews to ensure your industrial project succeeds. If you're searching for a versatile software application and expert engineering partner to minimize risk across the project lifecycle, you'll find it in the CCC Emulator.

What Is It and how does it work?

The CCC Emulator software application enables you to emulate a full plant CCC control system with a single tool. Operators can execute the entire suite of CCC control applications in a Windows OS environment that allows for interfacing with third-party process simulation software. Supporting both the S5 Emulator and Prodigy Emulator subprograms, the CCC Emulator seamlessly emulates up to 16 instances of CCC Pro Built controllers.

What Problems Does It Solve?

CCC Emulator supports Multi-Purpose Dynamic Simulator (MPDS) for turbomachinery controls system throughout the plant project lifecycle, from engineering design studies through simulated pre-commissioning, operator training, and ongoing optimization during plant operations.

Dynamic simulation is an important tool to verify the plant design for your critical turbomachinery assets. Low-fidelity and inaccurate emulation of CCC control system can affect the reliability of the simulation results and miss the benefits of having identical control logic and tuning parameters. CCC Emulator converts and rebuilds the CCC control system program for an Emulator target rather than a real controller target and therefore ensures an exact replica of control system logic and responses. Easily transfers snapshot with configuration and tuning parameters from real controllers to the CCC Emulator and vice versa.

Plant startup is a critical time with complexity of multiple commissioning activities. Tuning opportunities at the time of startup may be limited due to the process conditions and push on achieving production. CCC Emulator allows to pre-tune the control system in conjunction with process simulation and to reduce the commissioning time. Further, it allows to tune the CCC control system with large disturbances and conditions that may not be reproduce with the real system at site, designing and tuning the system for higher resilience.

Simulation and emulation software can be used for training operators on the control of turbomachinery, for which the fidelity of the user interfaces and engineering tools is critical to ensure operators are correctly trained. CCC Emulator Utilizes the same TrainTools engineering tools and Human Machine Interface as the control system, allowing for effective operator training.

From reducing startup time to enabling more seamless training, the CCC Emulator was designed for the unique challenges of industrial operations across the project and site lifecycle.

CCC Emulator is designed for industrial operators of CCC turbomachinery control systems that want to maximize the return of their investment in dynamic simulation studies or operator training simulators to reduce project risk and commissioning time and improve quality of the training.



Please sign in to view part numbers available for purchase based on your account

For more details and CCC support, please contact: Al Mukhtar Energy Division; Email: energy@almukhtarqatar.com, Tel: 44552583 Extn: 255 Mr. Althaf Rahiman, Customer Support Engineer, Email: althaf@almukhtarqatar.com, Mob: (+974) 39911922, Tel: 44552583 Extn: 320 Mr. Muhammed Shuaib, Energy Division Manager, Email: shuaib@almukhtarqatar.com, Mob: (+974) 66144027, Tel: 44552583 Extn: 253

Sign In