ask
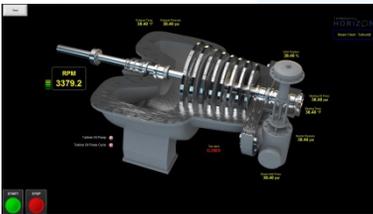
Introducing TURBOCHYLL® HORIZON

TURBOCHYLL Horizon is the newest member of the TURBOCHYLL Steam Chiller Controls family. Essentially, a Gen-II hardware and software evolution introducing ETHERCAT™, the world's fastest data communication network in industrial automation today! Packaged with the proven TURBOCHYLL ® Steam Turbine Chiller Control logic, localized *micro-link* **intelligent transponders**, *ifm effector® sensing products* and **SIEMENS SIMATIC Comfort Control**…HORIZON represents the absolute latest in today's revolutionary industrial control offerings.

TURBOCHYLL Horizon is a "product -built" offering, not a "project -built" approach. Essentially- a True Steam Chiller Control System…from beginning to end and out of the box! You will not find "one-off , field programmed and otherwise converted automation systems" here. Weeks of agonizing "*wait and hope*" completion dates followed by the availability of "*the programmer"* are an archaic relic in controls history!!

Lastly, the graphics are the most innovative 3D Modeled and dynamically moving packages built and designed from Liquefied Natural Gas Engineering on a 22" HD Siemens Simatic Touch Screen Human Machinery Interface. And….HORIZON is not simply a "*wait and trip control panel"* but a revolutionary approach in contemporary industrial automation, utilizing a predictive logic rather than reactive downtime.

Unlike anything previous…your TURBOCHYLL Horizon, with its onboard knowledge center will effectively maintain a critical and forward looking visibility of your Steam Turbine Chiller's operating conditions! Through the human machinery interface, operators will find a simple and contemporary approach to interactive touch screen messaging through the Predictive Logic **ASK!** Processor ….correcting and identifying conditions well in advance of trips, diagnostics and the wasteful energies and downtime that historically accompanied them!

Powerfully Proven TURBOCHYLL® HORIZON Steam Chiller Control Logic

- **ASK! HORIZON Predictive Logic Processor!**-*Advises all conditions in advance of diagnostic conditions utilizing technically interactive FYI and ASK font features*
- **Energy Efficient TURBOCHYLL Variable Speed Turbine (HEAD) & Variable Displacement Compressor (FLOW**) Logic-*Proven and powerfully efficient part load chiller and reduced CW logic!*
- **TURBOJETT Turbine Intelligent Nozzle Optimization with Hydraulic and Electric Logic Platform**-*Energy efficient Multi Valve Logic management to steam Chest built for Chiller applications!*
- **HYPERCHYLL-** *Compound Capacity Control "Adder Logic" using highly efficient "Time to Drift" compound speed control*
- **Fully inclusive ACCUTRAK Governor Controls**- *With Ramp and speed logic to include MIN/MAX governor, critical speed control as well as onboard slow roll features ,built in ACCUTRAK makes a "second expense governor" OBSOLETE*
- **TURBOCHYLL SMARTCHARGE-** Only Refrigerant Management Distillation System built in controls-*Removing oil degradation which can result in as much as 18-23% performance losses to consumption!*
- **WASTWELL Energy Efficient Hotwell Controls** -With VSD Logic - *Old antiquated and remote level controls completely replaced using Stainless steel well and VSD pumping for predicable efficient contemporary performance!*
- **TURBOCare Brush Buffer Seal Case Management**- *Brush Seal protection with onboard dry gas purge protects case sealing systems from costly damage and inefficient performance*

TURBOCHYLL® Horizon Componentry and Architecture

- **2GB Flash Card Processor**-*No onboard "one off"-"wait and test" laptop or proprietary programming!*
- **OMRON CPU** Processor utilizing fastest industry ETHERCAT Network available
- **ETHERCAT** *Network transmission datalink*
- **SIEMENS SIMITAC Comfort**-*Touch 22" Color Monitor*
- **MICRO-link** *Appliance Modules with Memcom data com cabling*
- **API 670 Compliant Overspeed**-*American Petroleum Institute PROTECH ELECTRONIC "mechanically redundant overspeed" system*
- **Low voltage** *Milliamp safe platform!*
- **Ifm efector** *Proven sensing elements in Stainless safe low voltage with display head features*
- **BACHARACH MGS250** *onboard EPA compliant refrigerant Monitor*
- **MODBUS BACNET** *Compatible*
- **BULKHEAD MOUNT M12 –** Stainless finger safe connections.