

Unsurpassed control for steam-turbine-drive chillers



Some manufacturers use a cobbled-together collection of control panels to operate their steam-turbine-drive chillers. That's not the case for the YORK® model YST chiller, manufactured by Johnson Controls. Its OptiView control panel was custom-designed for the sole purpose of operating this chiller. As a result, the YST Chiller offers control capabilities that are unsurpassed in the industry.

A wide range of standard and optional features offer operational, efficiency and reliability benefits that competitive chillers simply can't match.

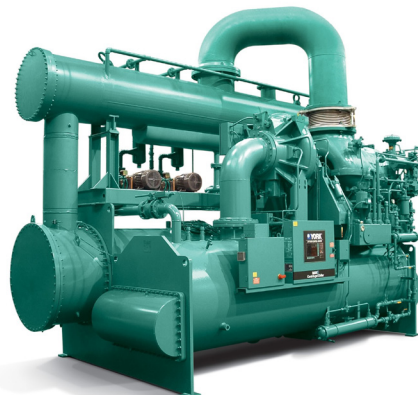
Control the complete chiller.

Operation – The patented Heads-Up Display gives you a real-time, dynamic snapshot of the entire control system. The optional Auto-Start feature offers automated local and remote start-up.

Efficiency – Speed and capacity are precisely matched to compressor performance through micro adjustment of PID loops integral to the control panel architecture. As a result, the OptiView panel may save you as much as 30 percent per year in steam costs, when compared to other control systems.

Reliability – Every aspect of chiller operation is integrated into the OptiView panel, for the utmost reliability. For example, if steam operating pressure goes outside of allowable limits, the control panel automatically adjusts the chiller capacity to keep it online, and alerts the operator.

The next page demonstrates the superior features of the OptiView control panel.



FEATURES	BENEFITS	YST	OTHERS
Benefits Key: O = Ease of Operation S = Safety R = Reliability Feature \$\$\$ = Energy Savings			
Fully automated remote start and run option featuring vibration monitoring and part load efficiency	\$\$\$, O	✓	
Turbine slow roll without chilled water flow	\$\$\$, O	✓	
Fully integrated controls for surface condenser, vacuum, and condensate level control, with optional standby pump start on lead pump faults	R, O	✓	
Fully integrated turbine governor function with critical speed control.	R, S	✓	
Alarms tied to capacity control system so that the chiller will automatically reduce its capacity to keep itself on line if possible	R, S, \$\$\$, O	✓	✓
History screen showing alarms and shutdowns	O	✓	✓
Selectable flow switch option (Analog or Digital)	O, R	✓	✓
True integrated speed, capacity and anti-surge controls	\$\$\$, O, R, S	✓	
Anti-surge control based on system pressure differential	\$\$\$, R	✓	
Quick re-start ability	\$\$\$, O	✓	
Selectable turbine power limiting feature	\$\$\$, S, R	✓	
True industry standard PID tunable control loops	\$\$\$, R, O	✓	
Fully integrated governor (no need for additional expensive component)	\$\$\$, R, O	✓	
Fully adjustable "dynamic brake" ratchet mode selector	R	✓	
Dedicated control hierarchy with safety priority (safety, anti-surge, capacity control)	R, S	✓	
Dynamic graphical Heads Up Display capacity control screen	O	✓	
Majority of timers and PID settings fully adjustable from graphical interface screen	O	✓	
Bumpless transfer between control features	R, O	✓	
Dynamic surge control graphic showing map	O	✓	
All analog points trendable (up to 6 simultaneous)	R, O	✓	
Software override for turbine overspeed testing	O	✓	
Selectable normal or soft shutdown	O, R	✓	
Pull down demand – HP limiting	S, O	✓	
Forced unload on any safety override condition	O, R, S	✓	
Smart freeze option	O, R	✓	
Automated loading valves	\$\$\$, O	✓	
Turbine radial vibration probes with integral graphical interface	R, S	✓	
Control panel interfaces with modern communication protocols, can be integrated with existing or future BMS systems (BacNet, Modbus, N2, LON)	\$\$\$, O, R	✓	
Turbine is prevented from running at any critical speed and chiller will shutdown if speed drops below predetermined set point	S, R	✓	