

Autopilot™ Control Comparison

The Hydro-Thermal K5 Autopilot control system has been successfully utilized in ethanol and starch applications since its development in 2003. Based on our experience since then, Hydro-Thermal is now offering a control system upgrade. The chart below provides an overview of the benefits of both Autopilot options.

	Autopilot-AB	Autopilot-H
Processor Software	RSLogix 500	Horner XL4
Panel Display	2 digital meters	Color touch screen display
Program Loading	Loading only with Allen Bradley software (MicroLogix 500)	Cscape Software is free, easily upgraded, and can be loaded from Micro SD cards
Local Control Option	No	Yes - User inputs on color touch screen
Alarm Indication	3 lights	Messages on color touch screen
DCS Interface	Analog signal	Analog signal or Ethernet communication
Data Recording	None	Data recorded to Micro SD every second
Control Options		
Autopilot Control	Yes	Yes
Heating Control	No	Yes
Pump Control	No	Yes (ON/OFF or VFD)



Autopilot™ Motor Comparison

The Hydro-Thermal K5 Autopilot control system has been successfully utilized in ethanol and starch applications since its development in 2003. The original system was driven by an air motor. Based on our experience since then, Hydro-Thermal is now offering an electric motor drive option. The chart below provides an overview of the benefits of both Autopilot motor options.

	Air Motor	Electric Motor
Drive Motor	Pneumatic	Electric
Power Supply	Air panel assembly with 2 directional control valves, oiler, and filter/regulator	Powers 100 to 240 VAC 50-60Hz; Control signal
Signal	3 discrete signals (enable/open/close)	3 discrete signals (enable/open/close), plus position feedback
Hazardous Location	Optional	Optional
Torque Control	Through air pressure settings	Through Servo configuration, offers more consistent over-torque protection
Speed Control	Through needle valve settings	Through Servo configuration
Position Feedback	Linear position transducer on CTA assembly	Internal to Servo allows for more accurate position feedback

About Hydro-Thermal Corp.

Hydro-Thermal is a global manufacturing company that designs, engineers, produces, and installs Hydroheaters. Our patented heating system mixes steam and process liquids completely while delivering precise and consistent temperature, instantaneous heating and no scaling or fouling of the product.