

## 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			
<b>Autopilot Control</b>	Yes	Yes	
Heating Control	No	Yes	
Pump Control	No	Yes (ON/OFF or VFD)	

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	Air Motor	<b>Electric Motor</b>
<b>Drive Motor</b>	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
<b>Hazardous Location</b>	Optional	Optional
Torque Control	Through air pressure setting	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.

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