

# Altanium® Next Generation Mold Controllers

Enhanced + Efficient + Evolutionary

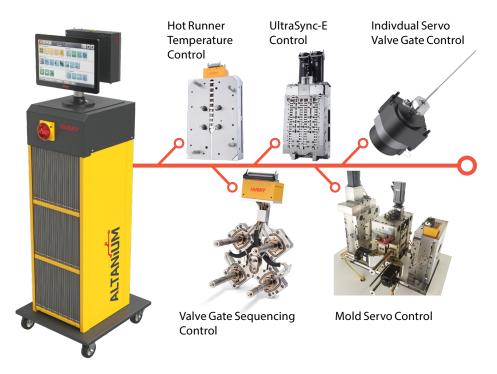




Husky is a leading global supplier of manufacturing solutions and services for plastics processors. We design, manufacture and integrate the industry's most comprehensive range of injection molding equipment, including machines, molds, hot runners, controllers, auxiliaries and integrated systems.

# A highly integrated control platform for all your hot runner and mold control needs

The all-new Altanium Neo6, Delta6, and Matrix6 mold controllers, powered by Husky's fourth-generation E-Series control card, deliver higher accuracy, broader hot runner compatibility, and a reduced footprint that frees valuable manufacturing space. With automated overvoltage protection, adaptive cooling, and advanced cybersecurity safeguards, they minimize downtime, cut operating costs, and protect against digital threats, providing peace of mind in a connected manufacturing environment—All of this while still offering the industry's most integrated platform for single-point access to temperature, servo, and valve gate control making them a smart, future-ready investment.



### Altanium™ Operator Interfaces

#### Altanium Neo6™

• 10.1" high definition color touch monitor



Full-featured hot runner temperature control for 2-48 zones optimized for 2-16 cavity applications

#### Altanium Delta6™

• 15.6" high definition color touch monitor

Full-featured hot runner temperature control for 2-128 zones optimized for 24-96 cavity applications and available with optional Valve Gate Sequencer and UltraSync-E control

#### Altanium Matrix6™

 22" high definition color touch monitor



Full-featured hot runner temperature control for 2-255 zones optimized for >96 cavity applications and available with optional Valve Gate Sequencer, Individual Servo Valve Gate, UltraSync-E and up to 6 axes of mold servo control

### Most Comprehensive Warranty in the Industry

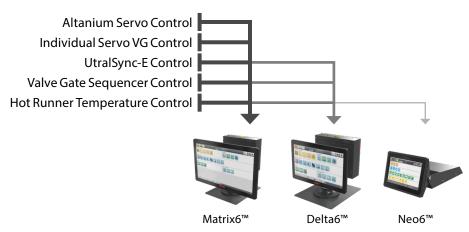
Husky offers an industry-leading 5-year warranty. Regardless of the configuration, this warranty includes comprehensive coverage of the mainframe, cards, and operator interface across the entire product line.

#### **Features:**

- 2 to 254 zones of temperature control
- Interchangeable cards and interfaces across the entire product line
- Industry leading Active Reasoning Technology (ART)
- Automated mold diagnostics and fault recovery

- Password and user name enabled security
- Expandable platform that supports mold servo and valve gate control
- Multi-language support
- Multiple networking and data exchange options (Industry 4.0 ready)





### The ART2.0 Advantage

Altanium™ mold controllers now feature our proprietary Active Reasoning Technology (ART 2.0), delivering superior temperature control, faster startups, and greater efficiency. With advanced autotuning and heat-up strategies, ART 2.0 achieves up to 42% faster heat-up times while using 30% less energy than conventional systems. Two unique heating modes—UniStart for rapid, even thermal expansion and AltaStart for added energy savings and reduced nozzle residence time—help maximize productivity and part quality from the very first cycle. Industry-leading thermocouple sampling, fully isolated inputs, and smooth power delivery ensure unmatched accuracy and consistency, reducing shot-to-shot and cavity-to-cavity variability. The result is a more capable molding cell that delivers higher-quality parts with less effort, energy, and downtime.

### E-Series Intelligent Control Cards

E-Series Intelligent Control Cards are the foundation of Altanium™ hot runner temperature control and diagnostic capabilities. These cards are interchangeable across the entire product line and are available in a variety of configurations to fit your specific temperature control application and budget.



# E and EL 4 Zone Card (16A per zone)

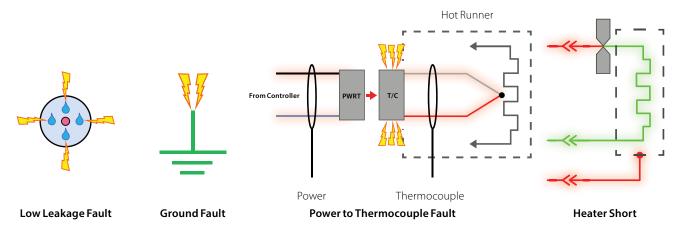
 Higher zone density reduces the overall footprint of the controller by as much as 25%, saving valuable floor space while maximizing flexibility to run different molds regardless of the tip/manifold wiring scheme

# E and EL 2 Zone Card (30A per zone)

 Ideal for high current manifold zones commonly used in automotive and other large part applications

### Diagnostic and Fault Recovery Capabilities

E-Series control card integrates current and voltage measurement to monitor mold and controller health, performing a startup circuit test to detect overvoltage conditions and heater faults before full power is applied. If an overvoltage issue is found, Altanium prevents operation until resolved, while step-by-step troubleshooting guides enable rapid correction of other common faults. During operation, the system continually monitors thermocouples and, in the event of a failure, automatically recovers by following another zone's output or applying a fixed power percentage based on historical data. These capabilities minimize unplanned downtime, protect equipment, and maintain consistent productivity.



	Cards		
Features	HL	Н	Benefits
Integrated design with external heat sink	✓	<b>✓</b>	Allows for a lower internal operating temperature which extends the working life of the cards
Active Reasoning Technology (ART)	~	<b>✓</b>	Provides accurate and repeatable temperature control that minimizes deviations from setpoint allowing the opportunity to reduce cycle times and energy consumption
Integrated all-in-one design	✓	✓	Minimizes discrete connections and components which increases reliability and reduces maintenance costs
Safety relay on non-switched leg	~	<b>✓</b>	Allows both heater legs to be isolated when zone is turned off and system is in run mode preventing electrical shock or shorts to ground when servicing the mold
Run with grounded or ungrounded thermocouples	<b>✓</b>	<b>✓</b>	Isolated thermocouple inputs provide the flexibility to run any mold without risk of electrical noise interfering with the temperature measurement
Thermocouple following (auto and manual)	<b>✓</b>	✓	Allows automatic on-the-fly recovery of failed thermocouples based on following the power output of a similar zone, eliminating any downtime
Zero-Cross or Phase Angle power output control	~	<b>✓</b>	Uniform flow of power reducing time that no energy is being supplied to the heater and ability to limit applied voltage
Card interchangeability	✓	✓	Reduced number of components to stock and maintain contributes to lower maintenance costs
Automated mold diagnostics	~	<b>✓</b>	Quickly and accurately diagnose issues in the mold without the need for additional tools, limiting downtime and associated costs
On screen board diagnostics (Delta5 and Matrix5 only)	~	<b>✓</b>	Identifies the exact location of failed card or component, such as a fuse or switching device, reducing downtime and maintenance costs
Power deviation alarm for plastic leak detection	✓	<b>✓</b>	Real-time power deviation monitoring provides early warning detection of resin leaks in the gate area of the mold
Softstart for even thermal expansion on heat up	~	✓	Contributes to longer mold component life, reduced material degradation due to excessive residency time and maximizes energy efficiency
Multi-cycle wet-heater bake-out	~	<b>✓</b>	Provides optimal method for extending heater life by applying low voltage to evaporate moisture trapped in the heater's insulation material
Real-time voltage measurement	×	<b>✓</b>	Helps in diagnosing heating issues in the mold and problems associated with the mains supply to the controller
Real-time amperage measurement	×	<b>✓</b>	Helps in diagnosing problems in the mold, calculating power consumption and preemptive heater failure
Real-time wattage and ohm calculations	×	<b>✓</b>	Helps in diagnosing problems in the mold, determining heater size for replacement and calculating power consumption
Real-time earth leakage measurement	×	<b>✓</b>	Helps to detect earth leakage faults and other types of shorts in the mold that single leg current measurement is not capable of finding
Fast acting short circuit detection	×	<b>✓</b>	Detects shorts in the mold and opens the circuit before the fuse clears providing cost and time savings associated with replacing blown fuses
Power to thermocouple detection	×	<b>✓</b>	Detects when power is mistakenly applied to a thermocouple circuit and shuts power off before the thermocouple wire or hot runner is damaged
Current deviation alarm for failed heater detection	×	✓	Real-time current deviation monitoring provides early warning detection of a failed heater on a single zone running multiple heaters using a single thermocouple
Over Voltage Alarm	×	✓	Detects if there is an overvoltage condition on startup and stops the controller from running, preventing catastrophic damage to the cards

## **Technical Specifications**

Operating Ambient Temperature	0°C to 40°C (32°F to 104°F)	
Storage Temperature	-20°C to 60°C (-4°F to 140°F)	
Humidity	0 to 95% RH, non-condensing	
Input Power	1-PH + Earth (3 wire) 200-240 VAC 3-PH + Earth (4 wire) 200-240 VAC 3-PH + N + Earth (5 wire) 380-415 VAC Other voltages require an input supply transformer (Supply requirements for functional integrity 190 to 254 VAC)	
Frequency Range	47-63 Hz (Alternative energy ready)	
Measurement Accuracy	±0.5°C (1.0°F) for range 0°C to 600°C (32°F to 1112°F)	
Calibration	Standard (Using a NIST traceable thermocouple source)	
Cold Junction Error	±0.5°C (1.0°F) @ 25°C (77°F) typically	
Temperature Stability	±0.05°C (0.1°F) / °C (°F) from ambient	
Control Stability	±1 digit – under steady state conditions	
Tuning Method	Active Reasoning Technology (ART) or manually entered parameters	
Thermocouple	Grounded or Ungrounded Type J (Type K optional); Sensor break and reverse detection; Upscale failure mode; High impedance input with zone to zone isolation	
Heater Outputs	Nominally 240 VAC (Other voltages optional); 16 Amps per zone standard. (30 Amps optional); Short circuit protection for each zone (Both legs fused)	
Alarms	Open Circuit Heater; Output Fuse State; High and Low Temperature; Shorted, Open or Reversed Thermocouple; Ground fault; Power Deviation; Current Deviation; Circuit Overload; Over Voltage	



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