## **Temperature Control**



#### SmartSeries® TSP Plus

## Everything you loved about the original TSP controller with new enhanced features for optimal control

- Automatic Leak detection
- Enhanced 7" Color Touch screen
- Storage: up to 100 Tools
- Full IO function card with 4 input + 4 output for
- communication
- Optional Thermocouple to monitor steel temperature and alarm if cooling is off
- Accuracy 0.01 °F
- Ability to control Small Mass / High Watt density nozzles
- Field selectable PID (parameters) to optimize control process
- APS technology (Adaptive Process System)
- SPI communication Protocol via RS232/RS485 included

## **SmartSeries® TSP (Touch Screen Panel)**

#### **SMART SERIES USER-FRIENDLY PERFORMANCE**

- Intuitive, leading edge touch screen display with adjustable viewing angle
- Automatically employed diagnostics to ensure optimal hardware configuration and performance
- Advanced micro controller technology
- Continuous ground fault and current measurement

#### PLUG-AND-PLAY SYSTEM ARCHITECTURE

- Patented "all-in-one" control card designed for reliability
- Modular 6-zone cards; 15 amps per zone
- Field calibration mode
- Universal power supply

# OPTIMIZES PERFORMANCE FOR ALL HOT RUNNER SYSTEMS

- Unique low voltage soft-start feature maximizes heater life
- Uniform startup feature reduces scrap and energy usage
- Proprietary adaptive auto-tuning control algorithm
- Phase angle or burst firing modes (time proportional, zerocrossing)

#### **ROBUST, HIGH-QUALITY DESIGN**

- Compact solid metal enclosure with heavy-duty industrial connectors
- Mold and controller protection features
- On-board heater and thermocouple fuses
- Portable stand available

### SmartSeries® Mainframes & Modules

#### **Mainframes**

- Available in 2, 5, 8, & 12-zones
- Heavy-duty Welded Construction
- RoHS/WEEE Compliant

#### TSM1512 MODULES

- Color touch screen digital display providing readouts for: Actual Temperature, Current Mode, Percentage Power and Current Reading
- Leak Alarm

#### **DSS1512 Modules**

Dual digital displays providing readouts of both process and setpoint temperatures at a glance. Closed-loop, fuzzy logic PID control, and auto-tuning of PID parameters provide precise control even under the most adverse

parameters provide precise control even under the most adverse processing conditions.

#### SSM1512 Modules

The SSM1512 maintains simplicity of operation with simultaneous display of setpoint and temperature

Cables, connectors, stands and all other accessories sold separately





## **Valve Gate Control**



The SVG controller, available in Hydraulic or Pneumatic, provides the user with full control over valve gate flow sequence, critical when molding complex or large parts. All SVG controllers feature the *NEW* APS (Adaptive Process System) technology providing faster processing and response speed.

#### **Benefits:**

- The sequential valve gate technology is integrated in a precise hot runner control unit with all available features or stand alone unit
- Designed to easily connect to any valve gate system
- Precise filling control with performance graphs displaying time and position, with up to 4 steps per cycle
- (2) digital and analog triggers for 2-shot applications

## **Configuration:**

- Pin position feedback for gate open /close confirmation
- Automatic and manual mode for individual gate control
- Absolute and incremental timer selections
- Single or dual acting solenoid valves for gate activation, valve banks relocatable
- Calibrate analog signals for position, pressure and volumetric settings
- Configure up to 4 cards to control as many as 48 single acting valve gates
- Reconfigure pin position feedback inputs for 12 additional sequences
- 500 or 1000 Watt 24VDC power supply Standard 220V single phase (185-245V range) or Optional 480V three phase





3L-1200 PSI / 3L-1600 PSI Power pack



3L-600 PSI Power pack



## Compact 4-zone pneumatic or hydraulic control unit

The VCTB4000 Valve Gate Controller is designed to provide timer-based control of up to four 24 volt DC valves used to actuate pneumatic valve gate cylinders as well as some hydraulic valves, and features a user-friendly auto-reset feature. Its compact size makes it extremely portable and requires minimal space. A single DB025 cable connects the controller to up to four remotely located valves, minimizing wiring and air connections.

