# Smart Series<sup>®</sup> TSP *PLUS* Temperature Controllers



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
- 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
- Optional Full IO function card with 4 input + 4 output for communication (ordered separately IOCARD-KIT)

| ITEM NUMBER | SLOTS | # OF ZONES |
|-------------|-------|------------|
| ITSP-12-15  | 2     | 12         |
| ITSP-24-15  | 4     | 24         |
| ITSP-36-15  | 6     | 36         |
| ITSP-48-15  | 8     | 48         |

Custom zone configurations available upon request

| ITEM NUMBER | DESCRIPTION                               |
|-------------|---|
| ITSCGR-A    | PCB replacement card, 6<br>zones @ 15 AMP |

See reverse side for accessories

#### 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

- "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

**IMPORTANT NOTICE**: Smart Series Controllers are not designed to control all zones as manifold zones. Doing so will cause the main circuit breaker to trip.



# MPC12C10G TO FRAME TO MOLD



#### Mold Power Cables (15 AMP Max)

| ITEM<br>NUMBER | ITEM<br>NUMBER | ITEM<br>NUMBER | OF ZONES | FROM 15 AMP<br>FRAME (S) | TO POWER INPUT<br>CONNECTOR |
|----------------|----------------|----------------|----------|--------------------------|-----------------------------|
| 10 FOOT LONG   | 20 FOOT LONG   | 30 FOOT LONG   | (MAX.)   | FOR CONNECTIONS          |                             |
| MPC12C10G      | MPC12C20G      | MPC12C30G      | 12       | 12 ZONE                  | PIC12G                      |

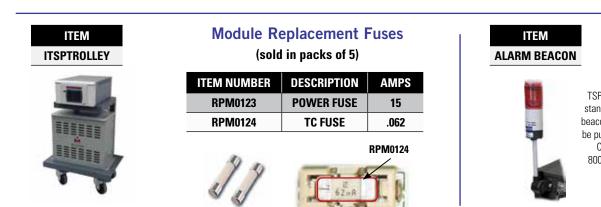
## Thermocouple Cables (for 15 or 30 AMP Mainframes)

| ITEM<br>NUMBER | ITEM<br>NUMBER | ITEM<br>NUMBER | <b>OF ZONES</b> |                 | TO THERMOCOUPLE<br>CONNECTOR |
|----------------|----------------|----------------|-----------------|-----------------|------------------------------|
| 10 FOOT LONG   | 20 FOOT LONG   | 30 FOOT LONG   | (MAX.)          | FOR CONNECTIONS |                              |
| TC12C10G       | TC12C20G       | TC12C30G       | 12              | 12 ZONE         | MTC12G                       |

TO FRAME

TO MOLD

| ZONES                              | CONTROLLER     |   | CABLES    | · | TERMINAL MOUNTING BOX |
|------------------------------------|----------------|---|-----------|---|-----------------------|
|                                    |                | ÷ | MPC12C10G | + | PTC12TBTS             |
| 12 ZONES<br>OF CONTROL<br>(15 AMP) | (1) ITSP-12-15 | + | (1 each)  | + | (1 each)              |
| 24 ZONES<br>OF CONTROL<br>(15 AMP) | (1) ITSP-24-15 | + | (2 each)  | + | (2 each)              |
| 36 ZONES<br>OF CONTROL<br>(15 AMP) | (1) ITSP-36-15 | + | (3 each)  | + | (3 each)              |
| 48 ZONES<br>OF CONTROL<br>(15 AMP) | (1) ITSP-48-15 | + | (4 each)  | + | (4 each)              |



TSP Plus controllers do not come standard with wiring for the alarm beacon. Controller and beacon must be purchased together as a special. Contact customer service at 800-626-6653 or dme@dme.net.

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