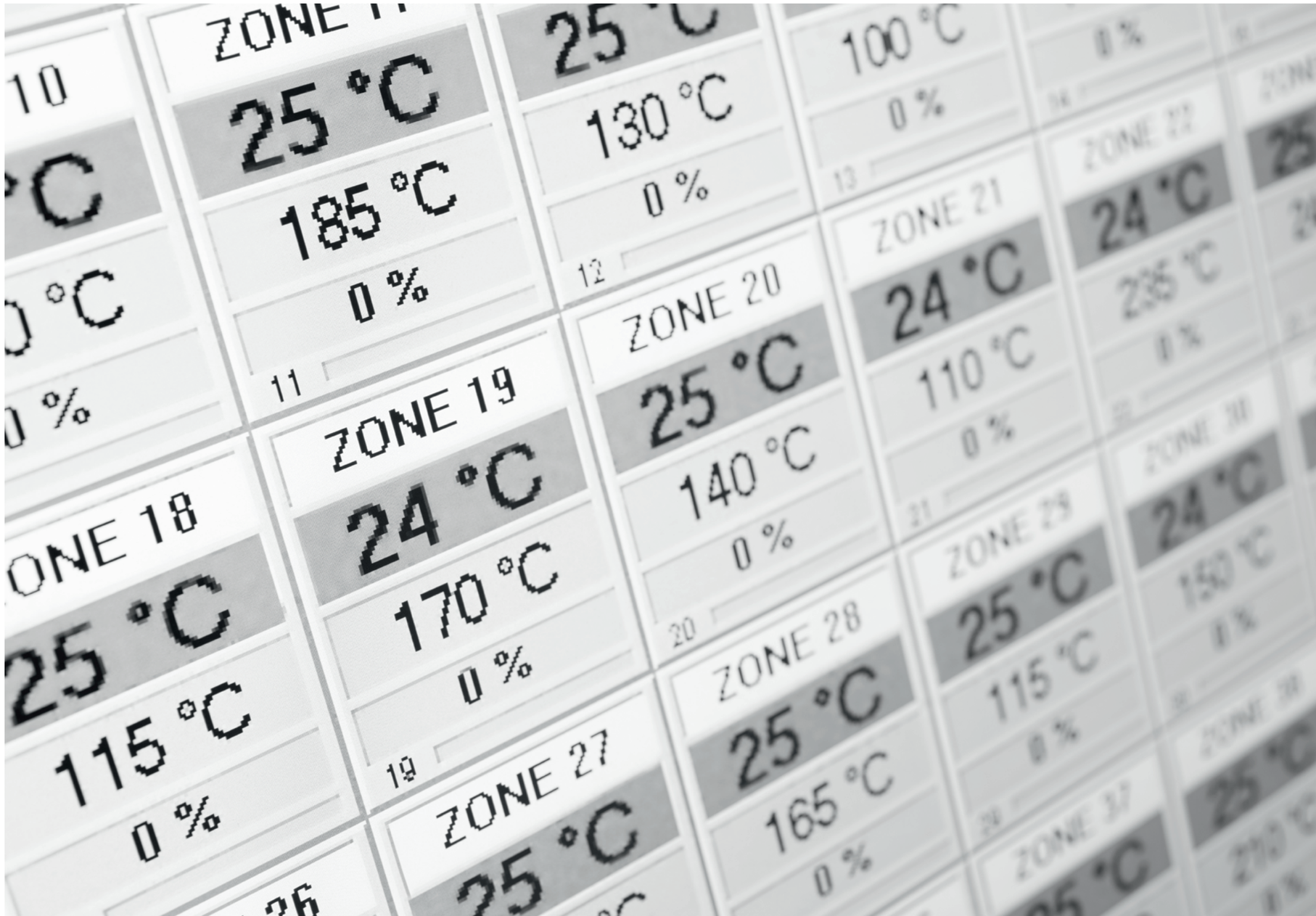
Otto Männer GmbH
Unter Gereuth 9–11
79353 Bahlingen
Germany
Phone +49 (0) 7663 609-0
Fax +49 (0) 7663 609-299
info@maenner-group.com

www.maenner-group.com

03/14 Technical specifications subject to change. Actual colors may differ.

männer
SOLUTIONS FOR PLASTICS
A business of BARNES GROUP INC

Hot Runner Control Systems



HCS 2
Hot Runner Temperature Control System

24 Control Zones

6 Control Zones

The number of HCS2 control zones can be specified in practical six-zone increments. The modular design and pluggable components of the HCS2 make it easy to exchange or replace components if needed.

The HCS2 is incredibly easy to operate. This, together with its easy-to-read display showing all set points and actual values, dramatically simplifies the system's usein production.

Alarm indicators light up only if there is a malfunction, giving operators an immediate over-view of the operating status of the hot runner system.

Basic settings are made at the factory, eliminating time-consuming configuration work and enabling immediate operation of the device. Set point values and parameters for different injection molds can be stored in the mold memory and accessed at the touch of a button.

SPECIFICATIONS

Housing

Powder-coated metal housing

Control Zones

6 to 36 control zones (specified in six-zone increments)

Connection to Mold (load / thermocouple separate)

6 zones	2 x 16-pin
12 zones	1 x 24-pin / 1 x 32-pin
18 zones	2 x 24-pin / 2 x 32-pin
24 zones	2 x 24-pin / 2 x 32-pin
30 zones	3 x 24-pin / 3 x 32-pin
36 zones	3 x 24-pin / 3 x 32-pin

Wiring of thermocouples and power plugs according to EUROMAP 14 (special configuration upon request)

Power Supply (+/–10%, 50–60 Hz)

Voltage / plug

230 V, 400 V; 50 Hz, 60 Hz / CEE, 5-pin

Device Features

Alarm output	2 two-way contacts
Control input	2 gate inputs (normally open contacts)
Data interface	9-pin SUB-D plug

Display

Set point value and actual value for all zones (°C or °F)

Output can be displayed in A or as a percent

Alarms for Temperature (overtemperature, under temperature)
Current (overcurrent, open circuit)
Thermocouples (broken, reversed)

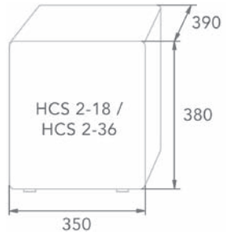
Characteristics

Power output	Max. 16 A per zone / non-contact switching at zero point
Thermocouples	Iron/copper-nickel, type J or L
Accuracy	Better than 1°C, self-optimizing (on corresponding hot runner models)
Operating temperature	10–40 °C

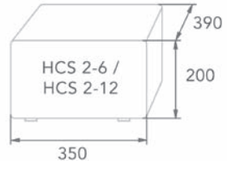
FUNCTIONS

- 6 to 36 control zones, specified in six-zone increments
- For multicavity molds and stack molds
- Modular design for easy servicing
- Boost function
- Standby function
- Thermostat mode
- Mold memory (for 6 molds)
- Programmable start-up: controlled temperature increase
- Diagnosis/wire test (optional)
- Data recording (optional)
- Load current display

Dimensions (mm)



24 Control Zones



6 Control Zones

HCS-TS 2

Hot Runner Temperature Control System with Touchscreen

24 to 72 Control Zones

72 to 180 Control Zones

The HCS-TS2 control system seriesis designed for controlling multi-cavity and stack molds and meets the highest standards for quality. In addition, the system's comprehensive diagnostic and logging functions offer distinct advantages when testing and starting up complex hotrunner molds.

Comfortable PC operation with touchscreen interface offers maximum comfort together with optimum clarity and ease of use. To save space, the operating console can also be detached from the controlunit.

Extensive data storage and display features make it easy to save and manage all calculated parameters.

The system helps you keep track of events by clearly recording and documenting the production process and any errors that occur.

Temperature control systems can be specified in six-zone increments. Pluggable modules enable fast replacement of components or expansion of the number of zones.

SPECIFICATIONS

Housing

Powder-coated metal housing

Control Zones

24 to 180 control zones (specified in six-zone increments)

Connection to Mold (load / thermocouple separate)

Wiring of thermocouples and power plugs according to EUROMAP 14 (special configuration upon request)

Power Supply (+/–10%, 50–60 Hz)

Voltage / plug

230 V, 400 V; 50 Hz, 60 Hz / CEE, 5-pin

Device Features

15" touchscreen	
Alarm output	2 two-way contacts
Control input	2 gate inputs (normally open contacts)
Data interface	9-pin SUB-D plug
Printer connection	USB

Display

Set point/actual temperature, power setting, and current

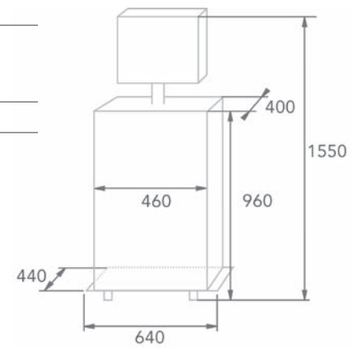
Error messages and alarms displayed in plain text

Characteristics	
Power output	Max. 16 A per zone / non-contact switching at zero point
Thermocouples	Iron/copper-nickel, type J or L
Accuracy	Better than 1°C, self-optimizing (on corresponding hot runner models)
Operating temperature	10–40 °C

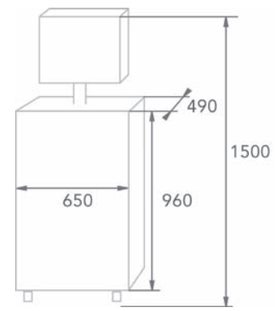
FUNCTIONS

- 24 to 180 control zones, specified in six-zone increments
- For multicavity molds and stack molds
- 15" capacitive touchscreen
- Boost function
- Standby function
- Master/slave capability
- Thermostat mode
- Individual on/off for each control zone
- Mold memory
- Mold diagnostics: electrical check of the mold
- Graphical trend display
- Programmable start-up: controlled temperature increase
- Easy upgrade
- Phase control
- Self-optimization function
- Choice of programmable start-up mode: controlled heating of all zones or delayed activation of nozzles
- Load current display
- Mold configuration wizard
- Leak early recognition system
- Insert control

Dimensions (W x H x D):



24 to 72 Control Zones

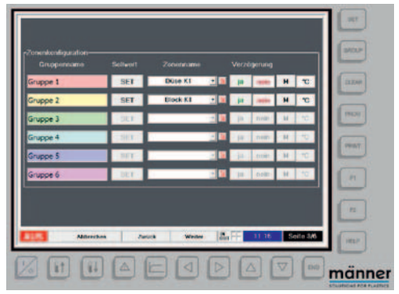


72 to 180 Control Zones

HCS-TS 2

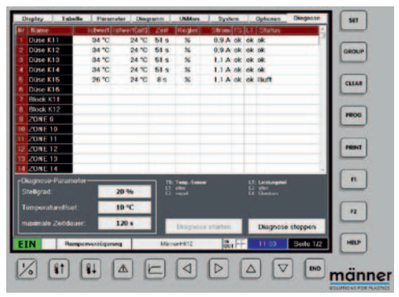
Hot Runner Temperature Control System with Touchscreen

True-to-life image of hot runner



Mold configuration wizard

- Configure your new mold in only six easy steps
- Wizard guides you all the way from setup to diagnostics
- Parameters can be modified later on if needed



Leak early recognition system

- Monitors individual cavities
- Early recognition helps to prevent production stoppage

	HCS-TS 2 For multicavity molds, stack molds	HCS 2 For multicavity molds, stack molds
Control zones	24 to 180 (in six-zone increments)	6/12/18/24/30/36 (in six-zone increments)
Touchscreen	15″	
Power output max 16 A per zone	•	•
Boost function	•	•
Standby function	•	•
Thermostat mode	•	•
Mold memory	•	•
Programmable start-up	•	•
Controlled temperature increase	•	•
Individual on/off for each control zone	•	•
System automatically applies set temperature if a sensor break occurs	•	•
Master/slave capability	•	•
Electrical check of the mold	•	•
Graphical trend display	•	
Plain text error messages and alarms	•	
Error and alarm log	•	
Group management	•	
Delayed nozzle activation	•	
Open heating	•	
True-to-life representation of hot runner system	•	
Optical phase control	•	
Self-optimization function	•	
Modular design	•	•