

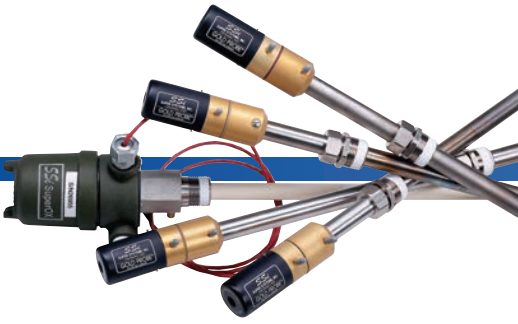


Super Systems
incorporated

www.supersystems.com



Gold Probes



GOLD PROBE™

- Patented design delivers accuracy and repeatability
- Engineered to be rebuilt for 50% of list price
- Rebuilds include 12-month warranty from installation
- State-of-the-art probe design features high velocity burn-out
- Carbon Potential, Dew Point, Oxygen
- Typical thermocouples: "S", "R", & "K"
- Cermet coating and ceramic sheath optional
- Installed directly in the hot zone

Furnace Calculator App



Probe/IR Carbon Calculator



BAZOOKA

- Specifically designed to control endothermic generators
- Used on rotary and muffle furnaces, or any furnace with a retort
- Installed in combustion chamber
- Integral sample well
- Operates at 1500 - 1600°F (816 - 871°C) for optimum life

PROBE CONDITIONING

- Single or multi-zone burnoff and reference air



HP15 / HP2000 Self-Heated Gold Probes

- Engineered for rotary, shaker, pit furnaces and modular endothermic generator applications
- Low-temperature protective atmosphere applications
- External sample applications when in-situ probe is difficult to install





Controllers

Single-Loop Controllers

- Designed specifically for atmosphere and temperature control
- Temperature, %Carbon, Dew Point, O₂, and Millivolts
- Internal timers for burn-out/probe maintenance
- On-board probe diagnostics
- Events: Eight input & ten output
- RS485, Modbus communication protocol
- Built-in timers
- High Limit FM approved
- 1/4, 1/8, 1/16 DIN sizes; UL approved

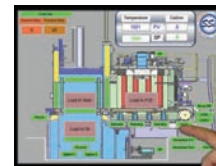


9000 Series Instrumentation

- Video recording/trend display - real-time and historical datalogging
- PID Control output, with multi-point auto-tuning
- Touch screen operator interface
- Ethernet (Modbus TCP/IP), RS485
- 300 Sophisticated Heat Treat Recipes
- Web browser compliant
- Three analog inputs, two 4-20mA outputs
- Four digital input, eight relay outputs with expansion
- Multizone capable with expandable I/O
- Load TC Module for TC display and datalogging
- Guarantee soak on control and load TCs



Retrofit Plate



Compact HMI



MODEL	TEMPERATURE	VACUUM	ATMOSPHERE	NITRIDING	TEMPERATURE AND ATMOSPHERE
9010 – Set Point programmer used for recipe management with discrete control instruments slaved	✓	✓	✓	✓	✓
9120 – Single or multi-loop controller used for atmosphere [%O ₂ , Dew Point (°F, °C) and temperature control]	✓		✓		✓
9130 – Single loop recipe programmable controller	✓				
9205 – Multi-loop recipe programmer for atmosphere furnace control	✓		✓		✓
9215 – Multi-loop recipe programmer for complete nitriding control	✓			✓	
9220 – Multi-loop recipe programmer for vacuum furnace control	✓	✓			

PC Configurator - Remote Controller Management

- When using PC and Configurator Software, touch screen operator becomes optional
- Configure outputs, alarms, PID tuning, and parameters
- Create, modify, start and stop recipes
- Backup and restore configuration



TS Manager

Data management for touch screen flashcard. Remote data viewer, remote screen control, historical data backup, SuperDATA integration

Analyzers

PGA3510 / MGA6010 Portable IR Analyzers

- 3-Gas NDIR (CO, CO₂, CH₄)
- O₂ cell, optional H₂ cell
- Software for data archiving
- Carbon calculation using 3 gases and temperature
- Portable, battery powered (rechargeable)
- Ethernet communications
- Multi-language
- User-defined equipment list
- Sessions for equipment data logging
- Ammonia capability option



DP2000 / DPC2530 Dew Point Analyzers

- Range: 0 to 80°F (-18 to 27°C)
- Digital display degrees: °F or °C
- DP2000 - Operator friendly, battery powered
- DPC2530 - Permanent, AC power, control/alarm



DPC3500/DPL4000 Low Range Dew Point Analyzers

- Range: -148 to 20°F (-100 to -7 °C)
- Designed for Nitrogen, Argon, Hydrogen gases
- Digital display degrees: °F or °C
- DPL 4000 - portable battery powered
- DPC 3500 - continuous



Hydrogen Analyzer

- Range: -148 to 20°F (-100 to -7 °C)
- Designed for Nitriding
- K_N, %DA, H₂ Readings

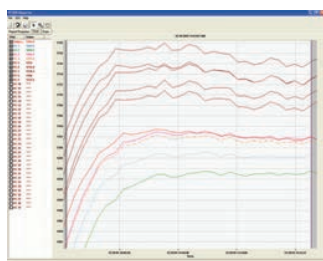
CAT-100

- Precise Carbon Measurement
- Range: 0.1 to 1.3% Carbon
- Math/Calculation Free



Multi-Channel Data Logger

SDS8120 / SDS8140 provides the hardware and software needed to meet industry standards for **temperature uniformity surveys** by logging and generating reports that address the **AMS 2750 E** specifications.



Portable Data Logger

The portable and rugged data logger is easy to use and addresses the many industrial applications where logging, trending, and reporting are required. The product is available in either the 20 or 40 channel version with user-defined inputs for each channel.



Thermal Barrier For In Furnace Uniformity Surveys

Specifications

- Color Touch Screen
- Built for industrial environments
- Designed specifically for temperature uniformity surveys
- Approximately 12 hours of battery life
- USB connection to PC
- Customized reporting tools

Flow Meters

SSi factory calibrated Gas Flow Meters are designed specifically for heat treating applications.

The FLO-SCOPE Manual Flow Meter provides accurate, reliable gas flow measurement.

The eFlo Meter provides digital readout and controls gas flow electronically. It includes automatic flow control capabilities, flow totalizer, Modbus RTU digital communications, alarm output, and analog output.



FLO-SCOPE
Manual
Flow Meter



eFlo
Electronic
Flow Meter

Video Recorder



Features:

- 3 screen options: 3.5", 5.7", 12.1" screens
- Universal Analog inputs - fully isolated, up to 48 inputs available
- Handwritten notes capability
- DIN rail mountable base and slim operator interface
- Redundant data storage
- Remote connectivity
- VR manager for remote data access
- Satellite analog base units allow for flexible integration
- Extended I/O module available with 8 outputs and 4 inputs
- AMS 2750 E Compliant
- Modbus master communications for slave instrument datalogging



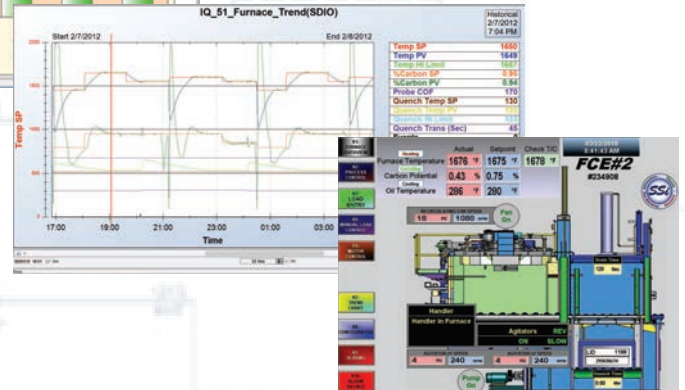
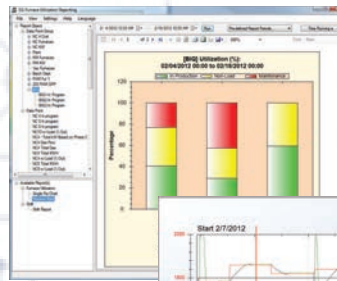
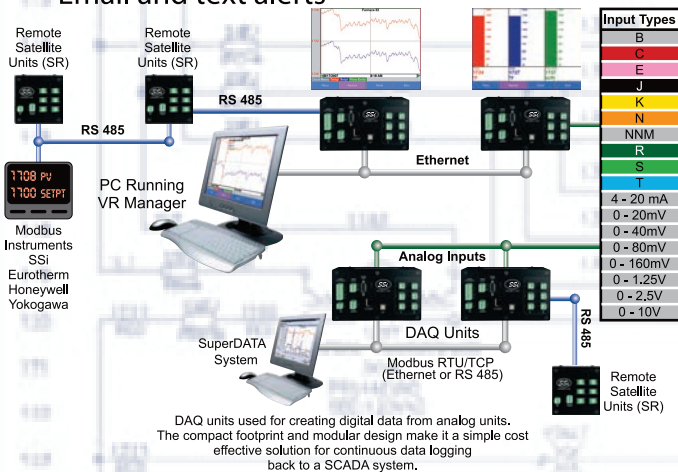
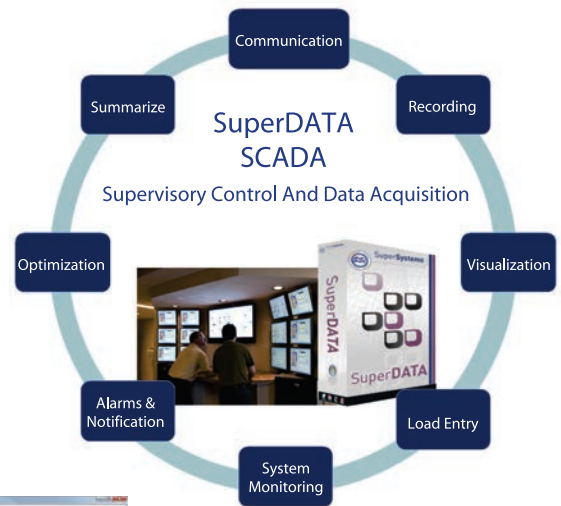
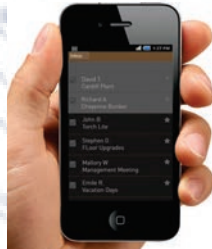


SuperDATA

SuperDATA is a plant-wide, open architecture HMI/SCADA package designed for the Heat Treat Market. SuperDATA contains a communications module, data logging module, custom display module, and trend charting module.

Features:

- Process Supervision and Plant Management
- Quick and Easy Access to PLCs and Instrumentation
- Communications Engine
- Alarm Recorder
- Event Manager
- Trending Chart and Display
- Real-Time Visual Display
- Multiple Workstations
- Communication Watchdog Module
- Remote Viewing and Support
- Email and text alerts



Engineered Systems

Engineered Systems

- Systems integrator serving the thermal process market
- Systems are designed, engineered and built for **atmosphere, gas nitriding, vacuum, annealing and custom processes**
- Endothermic and exothermic generators
- Single-loop and multi-loop control systems
- Turnkey packages featuring furnace motion, PID control and SCADA systems
- Visit our web site to view additional integrated systems

