

NITROGEN-METHANOL CONTROL SYSTEM



The SmartMeth™ control system is a fully automated nitrogen-methanol mixing system for heat treating furnace atmosphere production. It utilizes the latest in precision differential pressure flow measurement and touch screen controller design. The system is the first with built-in flow rate calculation to automatically set the nitrogen and methanol flow rates based on a desired %CO furnace concentration. The SmartMeth™ comes completely pre-piped, wired, and tested to perform to the exact furnace requirements.

System Includes

- Automatic set point calculation
- Full-color touchscreen interface
- Integrated paperless chart recorder
- Ethernet communications (Modbus RTU)
- Electronic process flow meters
- Integrated nitrogen purge
- Precision control valves
- Integrated atmosphere recovery

Available Options

- Carbon control (with recipes)
- Temperature control (with recipes)
- Atmosphere sensors

FEATURES & BENEFITS

- **Automatic Flow Setpoint Calculation:**
SmartMeth™ automatically calculates the required nitrogen and methanol flow rates to maintain a desired %CO at the required volume.
- **Automatic Atmosphere Recovery:**
SmartMeth™ provides additional synthetic gas flow on demand when introducing a new load into the furnace.
- **Paperless Chart Recorder:**
An integrated full color paperless chart recorder stores furnace temperature, %carbon, and synthetic gas flow furnace details.
- **Completely Assembled and Tested:**
A complete mixing and control system designed and tested to meet NFPA 86 safety guidelines.

SPECIFICATIONS

Power	110VAC @ 60Hz
Capacity	200 - 5000 CFH
Inlet Pressure	5-50 PSIG
Turndown	5:1
Repeatability	2%

N2/Methanol Control

Atmosphere Control (opt.)



Alarm History

Process History

USA

+1 414 462 8200
sales.us@group-upc.com

CANADA

+1 514 335 7191
sales.ca@group-upc.com

CHINA

+86 21 3463 0376
sales@mmichina.cn

FRANCE

+33 3 81 48 37 37
sales.fr@group-upc.com

GERMANY

+49 7161 94888 0
sales.de@group-upc.com

POLAND

+48 32 296 66 00
sales.pl@group-upc.com