



Key Benefits

- Replacement of ageing equipment
- Improved reports for QC
- Unlimited firing cycle recipes

Eye to the future | Window on the world

Summary

The system was designed to replace ageing and unreliable equipment used to monitor and control a roller hearth glass furnace. The recipe mechanism adopted allowed the operators to simply select a firing cycle for the next production run. It also gave the engineers control over many different aspects of the process including: defining the temperatures for twelve zones; and the drive speeds.

Four modes of operation were used: dormant; warm-up; select auto; and run auto. In dormant the system is set into a safe mode where all control outputs are turned to their off states and alarm checking is disabled. The warm-up cycle is used to allow the furnace to be heated up prior to running. Select auto allows the operator to choose the firing cycle recipe and a relevant set of alarm limits for the process. When the run auto stage is entered, the selected firing cycle recipe is used by the control routines to determine the temperature required in each zone.

During all stages except dormant, the system checks the furnace drive speeds, temperatures, limit switches etc., against the defined limits and in the event of a problem will notify the operator through the alarm display and using three different audible annunciators.

Equipment Used

- Eurotherm PC3000 containing
 - 4 x 4 Ch A/I
 - 1 x 4 Ch A/O
 - 2 x 14 Ch D/I
 - 4 x 12 Ch D/O
- Xycom Flat Panel VDU and Integral Keyboard



If you would like to find out more about this application, please contact the sales office who will put you in touch with the original Systems Integrator.

Turnkey Systems - Roller Hearth Furnace Control