Fenton Systems’ boiler control system is based on an Allen-Bradley SLC programmable controller. The system is mounted in a NEMA 12 enclosure and can be powered from either a 120 VAC or 480 VAC source. The system contains both a Combustion Control (CCS) SLC and a Burner Management (BMS) SLC. A color, touch screen, PanelView MMI is mounted on the door of the enclosure. The boiler is operated and tuned from this MMI.

**Control Enclosure:**
- Floor Standing NEMA 12 enclosure
- Option for 115 VAC or 460 VAC power Source
- Lighting disconnect for 480 VAC system
- Fold down shelf for maintenance equipment or programming panel
- Dual 24 VDC loop power supplies with status monitored by SLC
- Alarm horn and water alarm bell
- Optional enclosure “top hat” for pressure and draft gauges
- Flame Scanner with process meter display of flame strength

**Features:**
- MMI provides complete real time status of boiler
- Tune fuel/air ratio from MMI for optimum combustion control
- Tune control loops from MMI with embedded trend graphs
- Standard Allen-Bradley components available from any AB distributor
- Integrated Burner Management System and Combustion Control System
- Network BMS and CCS to Power House Monitoring System
**Combustion Control Features:**
- Full set of boiler control loops:
- Boiler Master with bias
- Full metered Fuel/Air Loops with cross limiting and O₂ Trim
- Furnace Pressure
- Three element drum level control
- Password protected tune screens for PID’s, Fuel/Air ratio, steam flow
- MMI display of all boiler process variables
- Fuel totalizers for current day and previous day
- Loop power supply status monitoring
- Network Interface to Power House Monitoring System
- Transmitter Failure detection with loop shut down interlocks

**Burner Management System Features:**
- Burner startup and shut down sequencing performed by SLC to provide flexibility for diverse applications
- Redundant shut down circuits provided by SLC and master fuel trip relay
- Independent SLC scan watch dog timer
- MMI displays burner sequence status and safety circuit chain status
- Network interface to Power Plant Monitoring System