

Sequence of Operation - Flare Ignition Panel

The flare control panel currently works in the following manner:

- 1) The igniter creates a spark every 20 seconds whether or not a flame is present and whether or not stack gas is present.
- 2) If gas exists in the right combination with air, the flare ignites.
- 3) When a flame is confirmed by the fire-eye a timer starts. This timer is currently set at 30 seconds. When the timer times out, the blower starts.
- 4) When the flame detector does not see a flame (e.g., when the flame goes out or when the wind blows the flame away from the sensor) an adjustable Off-Delay timer starts. When the timer times out, the blower stops. This timer is currently set at 15 seconds. (This is to minimize the starting and stopping of the motor during hard-to-detect flame conditions.)
- 5) A pressure switch is mounted on the stack line upstream of the flame arrester. It is set to trip at $\frac{1}{2}$ psi. If a flame is not confirmed, but there is pressure on the stack line, then an alarm is generated. This is a local alarm only - the red beacon lights. When a flame is detected or the pressure drops below $\frac{1}{2}$ psi the alarm automatically clears.
- 6) The flare scrubber has two level switches - a high level and a high, high level. Either or these switches will generate an alarm. This is a local alarm only - the amber beacon lights. This alarm latches and will clear only if the level drops and the Reset button on the local panel is pressed.
- 7) A Lamp Test button is included which will light both beacons until the button is released.

Note: When power is interrupted the amber beacon will light until the reset button is pressed. This is necessary in order to make the control wiring "fail-safe."