

# SF<sub>6</sub> Inspection

Chicago White Metal Casting July 26, 2004

#### SF<sub>6</sub> System Specifications

- $SF_6$  is mixed with dry air
- Dry air used has a dew point of -100 deg F
- $SF_6$  to air mixture is .4%
- Main distribution line pressure is at 90 PSI
- Branch lines to furnaces are at 20 PSI
- Flow rate is 6-10 sq. cu. Ft./hr

## Gas-Air mixer No leaks detected



#### 2002 Inspection Gas-Air mixer





## **Inspection of Piping Aisle**

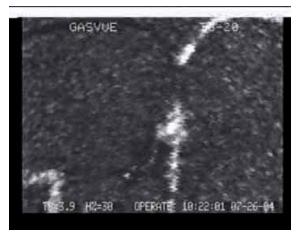


### Piping Aisle Leaks on pulse valves #29 and #27







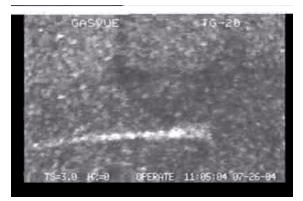


## Piping aisle Leaks on flare fitting and pulse valve #22



## Piping Aisle Leaks on flare fitting and pulse valve #22









## Piping Aisle Leak on pulse valve #21





#### **Distribution line Inspection at casting furnace**



#### Machine #13 Leak on shaft seal

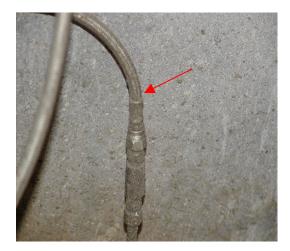




## Machine #14 Leak on shaft seal and gas line above floor







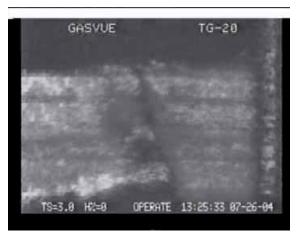


## Machine #21 Leak at coupling/gas line connection

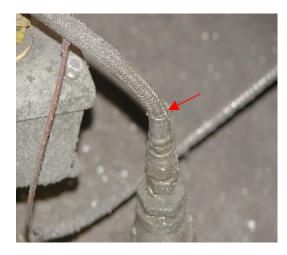


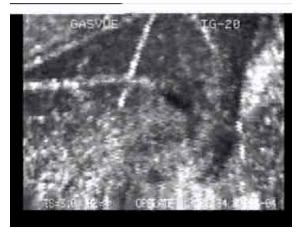
## Machine #21 Leak at coupling/gas line connection





## Machine #24 Leak at gas line and shaft seal









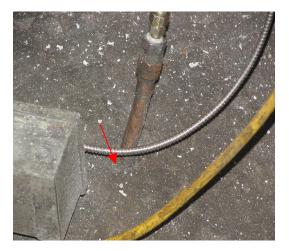
#### Machine #25 Leak at shaft seal





## Machine #27 Leak at copper gas line

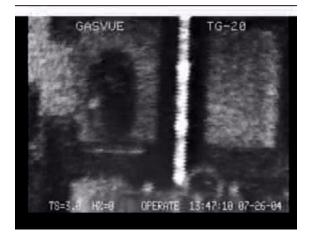






#### Machine #27 Leak at shaft seal





## Machine #30 Leak around shaft seal plate



