

# Laser Imaging SF<sub>6</sub> Inspection for Chicago White Metal Casting, Inc.

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

- SF<sub>6</sub> is mixed with dry air
- Dry air used has a dew point of -100 deg F
- SF<sub>6</sub> to air mixture is .4%
- Main distribution line pressure is at 90 PSI
- Branch lines to furnaces are at 20 PSI
- Flow rate is 6-8 sq. cu. Ft./hr

### Mixing station



### Mixing station inspection



#### Mixing station



# Confirmed regulator leak using soap test



## Regulator flange leak Tightened screws and leak stopped



# Confirmed solenoid valve leak using soap test



# Solenoid valve leak Replaced valve – leak stopped



#### Central distribution line inspection



#### Service corridor



### Service corridor branch line inspection



#### Flow meter inspection



#### #21 Machine - feed tube flared fitting



#### #21 Machine - feed tube flared fitting



### #26 Machine – feed tube flared fitting



#### #26 Machine – feed tube flared fitting Tightened fitting – leak stopped



#### #29 Machine – copper fitting leak



#### #29 Machine – copper fitting leak Tightened – leak stopped



#### Shaft seal leaking on all machines



### Shaft seal leaking



### New design feed line



#### Hard at work

