



# VALMET Performance Services

Mobile Furnace Inspection Camera System

# Valmet Field Services

## Mobile Furnace Inspection Camera System

- Valmet provides a variety of services for boiler operators to maintain safe, compliant, and efficient boiler operations.
  - Environmental Compliance
    - Recovery Boiler Emissions Troubleshooting
  - Boiler Efficiency Improvements
    - Fuel Distribution Improvements
    - Burner Optimization
    - Higher Boiler Availability
    - Improved Heat Transfer Efficiency
    - Can be Operated in Air Ports, Observation Ports and Manways.
    - Recordable Video via Portable DVR



20/21 Straight Lens Assembly  
(Shown)

Also Available is an

Rotating Off Axis Lens Assembly  
Which Allows 90° Degree Off Axis  
and Rotates 360° Around Its Axis

# Recovery Boiler Operation

## Fuel Distribution/Liquor Spray

- **Black Liquor Recovery Boiler**
  - Rotating Off Axis Lens Assembly looking downward from the Quaternary Air Port Level
  - Two liquor guns on the front wall
  - Tertiary air port located centre of picture.
  - Left hand picture shows poor spray pattern observed with dirty liquor sprays.
  - Right hand picture shows spray pattern observed with clean liquor sprays.

Dirty Sprays

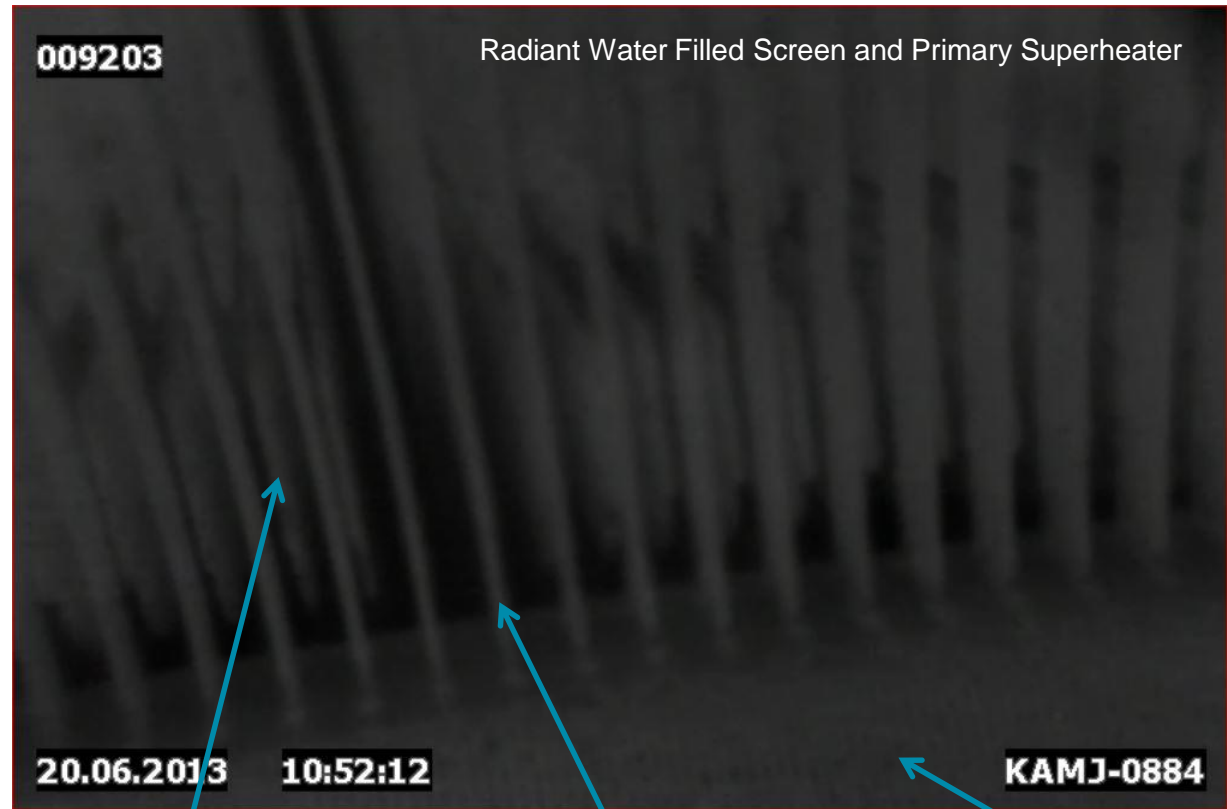


Clean Sprays



# Inspect Boiler Furnace for Radiant and Convective Transfer Surfaces

- Very Effective in Viewing Heat Transfer Surfaces for Deposition and Pluggage.
- Locate and View Upper Furnace Deposits in the Front Roof Corners (Floor Damage)
- Straight Lens Assembly Can Look Into the Leading Superheater Passes for Plugging
- Watch Sootblower Action



Primary Superheater

Radiant Screen Tubes

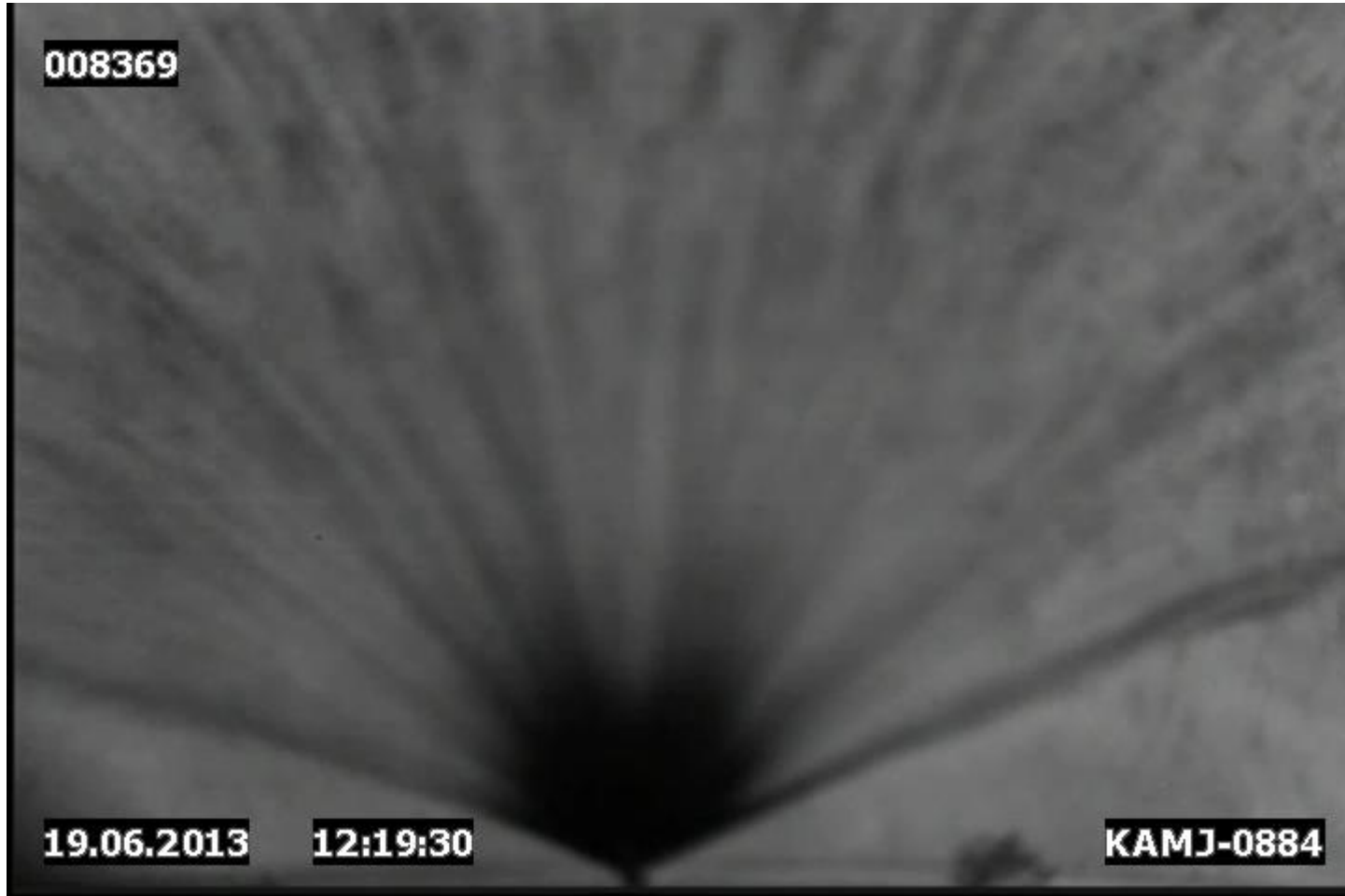
Nose Arch

# Natural Gas Only

(note cool area at spouts)



# Initial Liquor Firing 28mm, 45° Angle Splash Plate Low Pressure Spray



# 28 mm, 45° Angle Splash Plate @ 20.3 psig Pressure



# 28 mm, 45° Degree Splash Plate 17.8 psig @ 260 F





# Screen and Superheater Viewed from Quaternary Air Port



