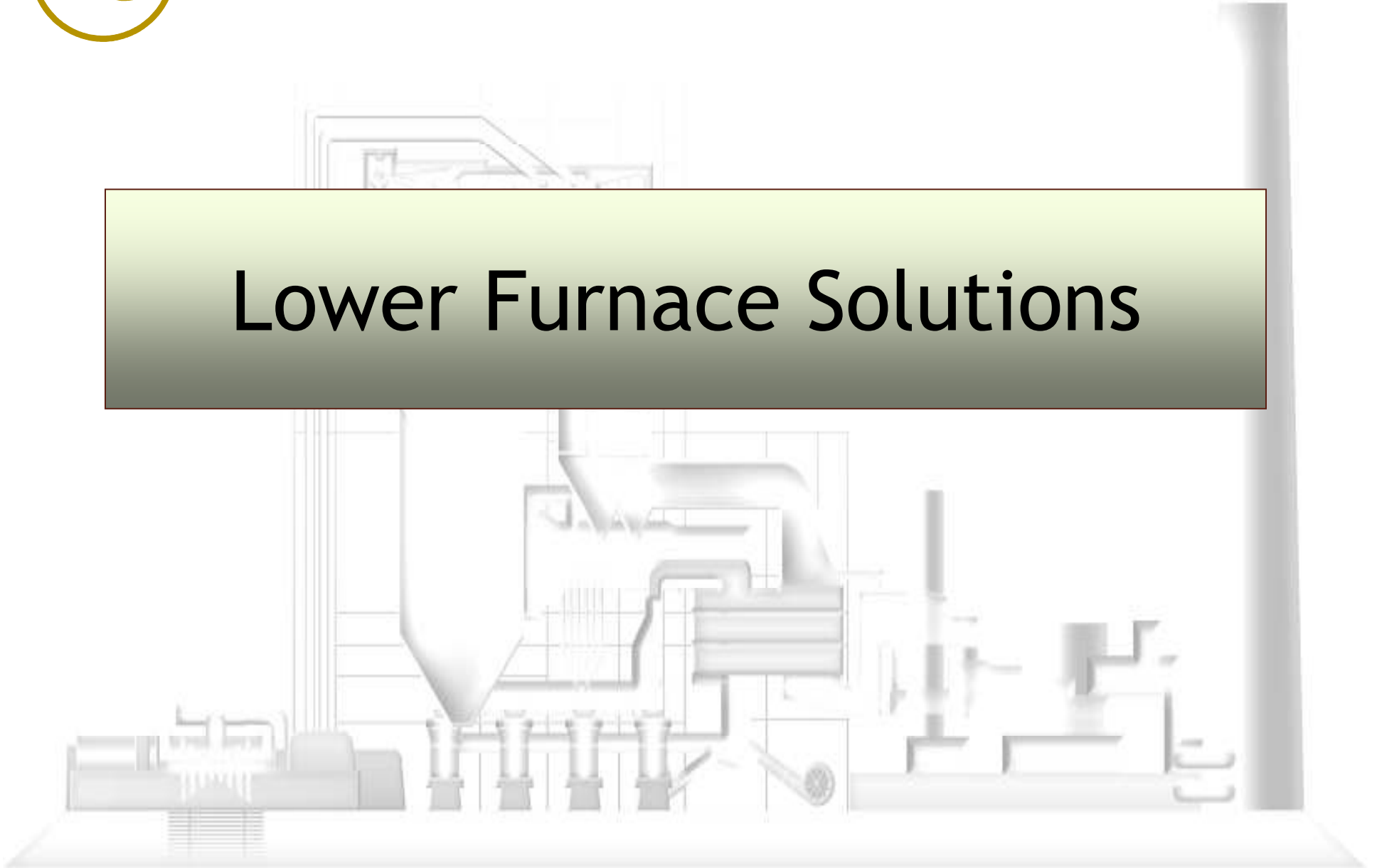


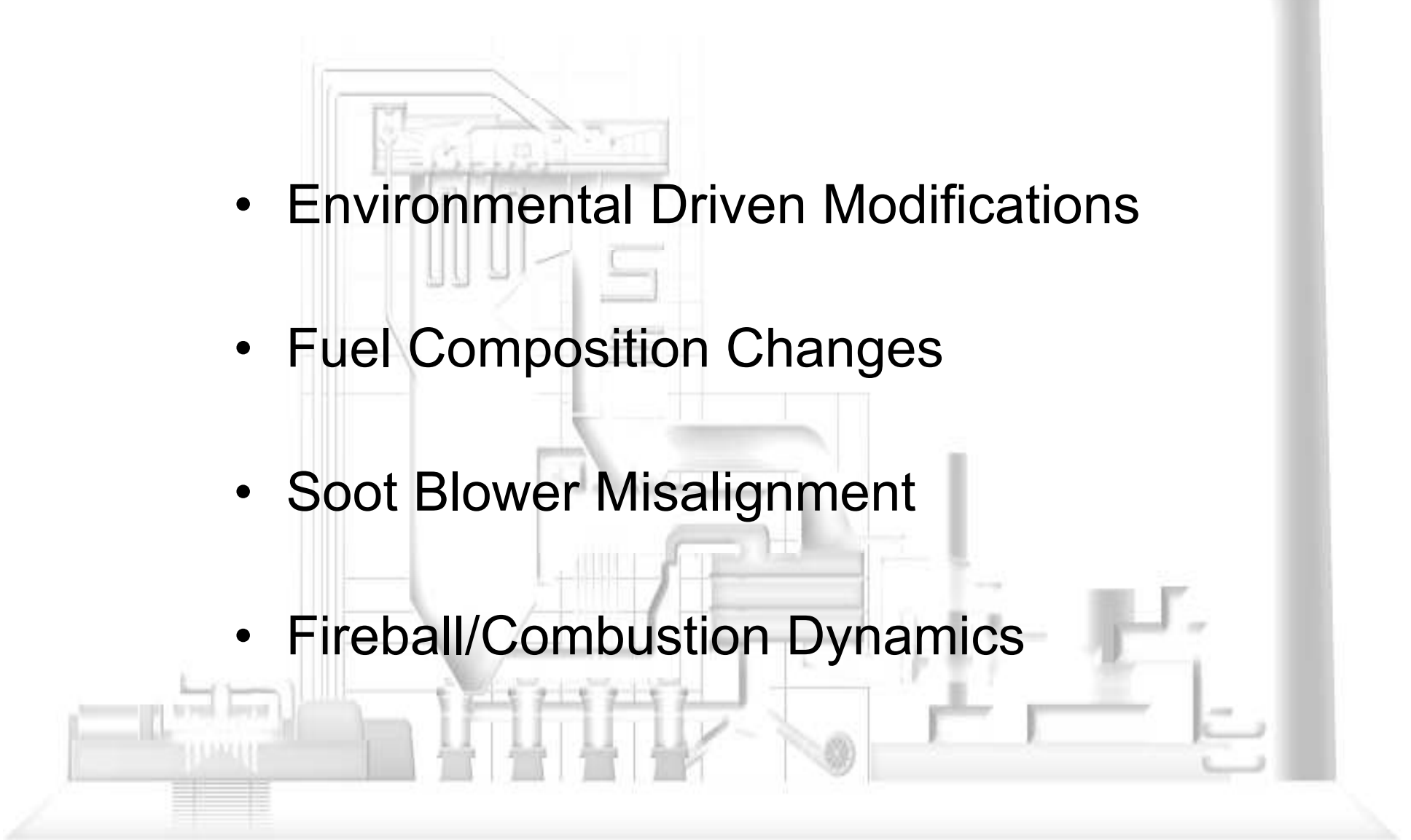


Lower Furnace Solutions



Fireside Considerations

- Environmental Driven Modifications
- Fuel Composition Changes
- Soot Blower Misalignment
- Fireball/Combustion Dynamics



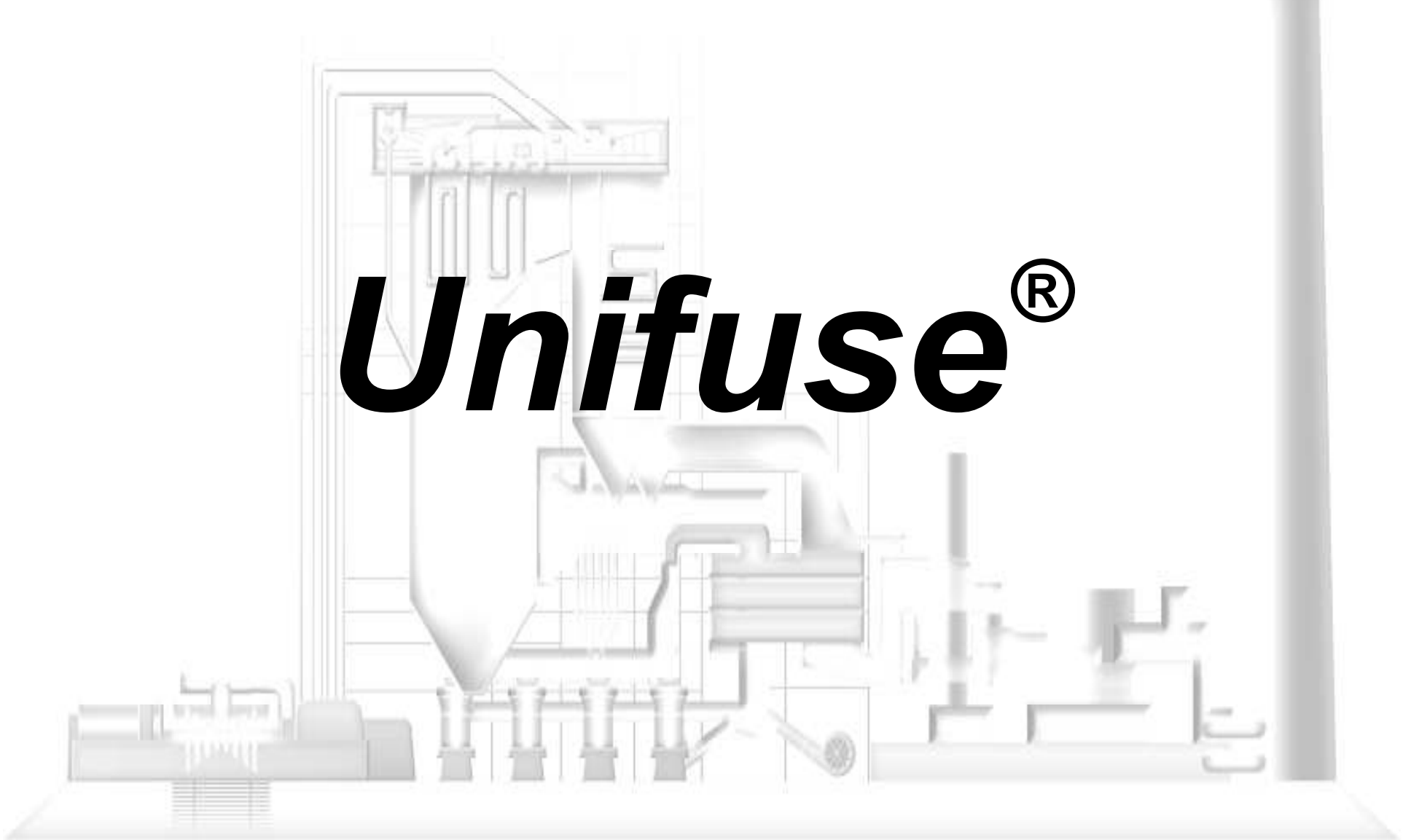
Corrosion/Erosion Maintenance Options

- **Tube Replacement**
- **Mechanical Coatings**
 - Shields
 - Thermal Spray
 - Refractory
- **Manual “Pad” Welding**



The WSI Solution

Unifuse[®]



What is Weld Metal Overlay?

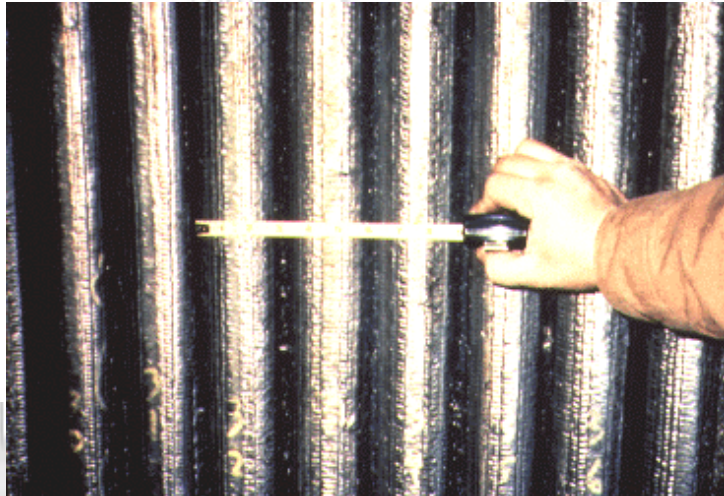
Definition

- **Weld Metal Build-up**
 - One or more layers of weld metal applied to the base metal to obtain desired properties or dimension.
- **Corrosion Resistant Weld Metal Overlay**
 - Dissimilar weld metal deposit on base metal or over Weld Metal Overlay to deter corrosion.

What is *Unifuse*®?

- ***Unifuse*® is:**
 - A Comprehensive Program for Delivering Optimized Automated Weld Overlay Performance Properties.

***Unifuse*® 180**



***Unifuse*® 360**



Why *Unifuse*®?

- Applies optimal weld chemistry
 - Controls all weld parameters
 - Lowest dilution achievable
 - Real-time display
- Recent improvements
 - PLC Controlled
 - Proportional Automatic Height Control
 - Proprietary Wire Feed System
 - Watchdog system



Field Applications

- Fastest schedule performance in industry
- Multiple system capability
- Minimal impact on other work
- Typical process
 - Grit blast
 - Inspection
 - Application of overlay
 - Post weld inspection



Unifuse® Shop Applied

- Panels overlaid in two stands
 - Up to 60 feet long x 6.5 feet wide
 - Annual capacity: 140,000 square feet
- Option:
 - *Unifuse*® 180° panels or panels fabricated from *Unifuse*® 360° tubes
 - [Basin Electric - Laramie River Station](#)



Lower Furnace Solutions

Typical Locations

- Waterwall panels
- Cyclone Burners
- Burner Corners
- Nose Arch
- Soot blower openings
- Roof tubes
- Coutant slopes
- Slopes

