



## HIGH EFFICIENT BURNER INSTALLATION

### Step 1

Analyze current situation and include any identified future changes, select equipment, generate cost savings and project cost, obtain authorization to proceed.



### Step 2

Create job schedule based on customer's requirements and equipment delivery, order equipment and materials, organize manpower and tools for deployment.



### Step 3

#### Week 1 –

Remove existing burner and controls, inspect condition, install new burner and controls, and gas train. Tear down and housekeep job site.



### Step 4

#### Week 2 –

Power up new burner, analyze and calibrate all controls, provide owner training, produce and complete owner's punch list. Owner checks off completion.





**CONTACT: Don Hidden**  
**(309) 674-6644 Ext. 206**  
**dhidden@ruylecorp.com**

## **GO LINKAGELESS WITH A FUEL/AIR RATIO CONTROLLER....**

*With energy costs soaring, a fuel/air ratio controller provides the means necessary to maximize system efficiency while reducing plant fuel costs significantly.*

- 1) ENERGY SAVINGS –
  - Reduces fuel usage from 5-15% or more
  - Prevents the burner from short cycling
  - Many utility companies offer rebates if linkageless fuel/air systems are installed
  - Increases the turndown ratios
- 2) MAXIMUM BURNER EFFICIENCY –
  - Matches the load to the boiler firing rate
  - Combustion efficiency is maximized throughout the curve, instead of only at one point
  - Multiple points on the fuel/air curve
  - Accuracy of the servo motors is  $\pm .1$  degree
  - Constantly monitored and checked by the microprocessor
- 3) INCREASED EQUIPMENT LIFE –
  - Equipment cycles less frequently
  - Reduces wear and tear
  - Extends the equipment's lifespan
  - Eliminates costly down time on the boiler
  - 99% maintenance free
- 4) SYSTEM RELIABILITY –
  - No fuel/air ratio curve erosion due to component wear and shifting over time, as with mechanical linkage systems
- 5) FLEXIBILITY –
  - Allows for two different fuels
  - Two independent fuel curves
  - Provides maximum efficiency for two fuels
  - Can be installed on new burners or retrofitted on old burners
  - Will communicate with the building's existing automation system(s)
  - Will work with O2 Trim systems
- 6) DYNAMIC SAFETY –
  - Fail safe potentiometer test
  - Curve tracking verification
  - Safety relay test
- 7) AFFORDABILITY -
  - Payback is typically less than 1-2 years
  - Capable, flexible, efficient and safe
- 8) INSTALLED LOCATIONS –
  - OSF Medical Centers
  - Ameropan Oil Company
  - Bromley Hall – University of IL, Champaign
  - Evonik Chemical Corporation