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Applicationbrief

Eclipse Product: Flue Fire Burners

Submitted by: Douglas McDonald

Application: Fresh Air Firing

Site Location: City of Burbank, Water and Power Department

System Description: The burner is used to pre-heat the combustion air for the City's Olive 2, Steam Unit. To

insure flame stability over a 10:1 process air turndown, 1900 cfm of augmentation air is utilized. The augmentation air is drawn from the process air ductwork just upstream of the burner. This is done to reduce the blower horsepower requirements and minimize the effects of the changes in duct pressure associated with variation in the process airflow. In addition to the FlueFire Duct Burner, a 4" Valve Train, Augmentation Air Blower, Flame

Safety Panel, and a Combustion Chamber were also supplied.

Technical Data: Process/Fresh Air:

Flow: 459,000 lbs./hr

Turndown: 10:1
Temperature: Ambient

Burner:

Type: 63 FFB FlueFire
Duty: 63.0 MMBtu/Hr
Orientation: Vertical Up Firing

Fuel: Natural Gas

Combustion Chamber:

Cross-Section: 98" x 66"
Pressure: 17" w.c. (Max.)
Temperature: 600°F (Max.)



Packaged valve train and flame safety panel



FlueFire burner mounted in duct section.



Pre-assembled duct section and combustion chamber simplify on-site installation.