

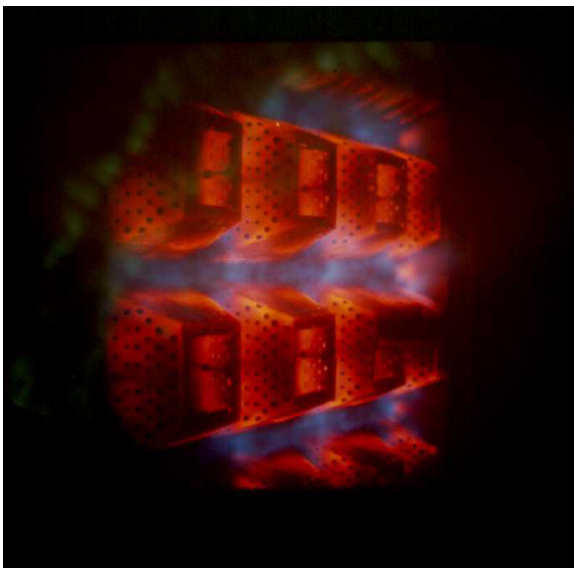
Application**brief**

Eclipse Product: InciniFume Burners
VAI – Incineration
VAI-C – Supplemental Firing

Submitted by: Douglas McDonald

Application: Supplemental Firing

Description: The Burner is used to supply heat to the exhaust gas flow of a gas turbine, upstream of a Heat Recovery Steam Generator. The system is designed to operate with the turbine only or with the turbine and supplemental duct burner utilizing a split-range control. The burner includes a small 10 kW pilot operating on stand-by to ensure the fastest response time. In case of a turbine fall-down, the system changes automatically to a fresh air operation (FA) maintaining high performances of steam production. This installation has been in operation since November 1994 into a combined cycle cogeneration system which improves the global efficiency of the steam turbine.



VAI-C Burner for Supplemental Firing

Technical Data:

Gas Turbine:

Make: Ruston
Model: Tornado 5.9 MWe
Special: Cheng cycle 6.2 MWe

FA / TEG modes:

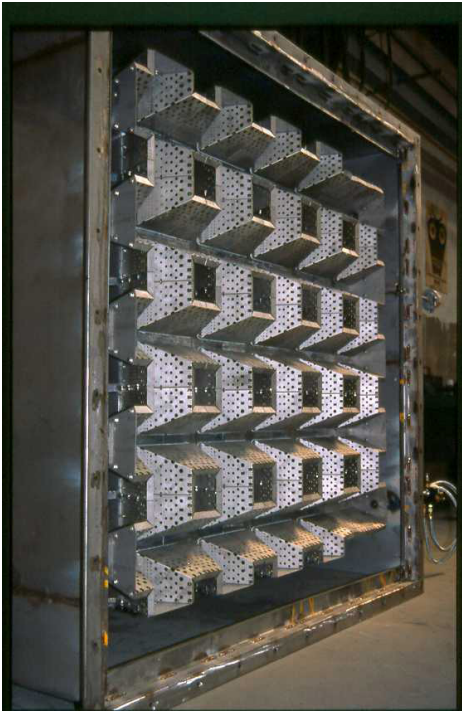
Flow: 28.5 – 27.4 kg/s
Oxygen content: 21% - 15% vol.
Temperature in: 15 – 475 °C
Temperature out: 775 – 900 °C

BURNER:

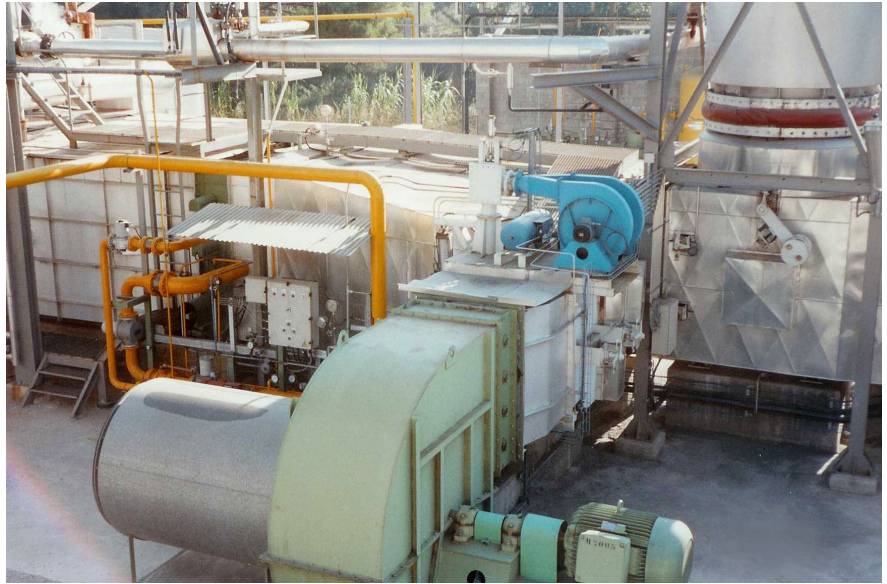
Type: Incinefume VAI-C
Duty: 22 - 15MW
Fuel: Natural Gas
Special: Two zones

RECOVERING BOILER:

Make: GEA IBERICA,sa
Model: Deltak licensed
Steam Production: 22 (FA)-30 (TEG) Tn/hr



Duct Mounted VAI-C Burner



Overall Installation