



The VeLoNOx™ Burner with the option named “Dual Pilot” is the latest Ansaldo Energia proposal to enable the AE/V94.3A/SGT5 4000F GTS to comply with the most stringent environmental emissions standards (30mg NOx/CO) while allowing maximization of Gas Turbine performance (Higher Power Output).

This burner, completely retrofittable on existing AE/V94.3A/SGT5 4000F engines, relies on proven technologies developed in the last years by Ansaldo Energia’s Research & Development Team.

How You Benefit

The package is easily applicable to all Customers owning any F-class AE/V94.3A/SGT5 series gas turbine which has a triple fuel gas line to the burner, and can be installed during a Hot Gas Path Inspection or Major Overhaul.

CUSTOMER BENEFITS

- Compliance with the most stringent environmental emission requirements with Pre Mixed Combustion Mode (VeLoNOx™/single PILOT line 1)
- Power Output Maximization with Dual Pilot Combustion Mode (DUAL PILOT line 2)

TECHNICAL ADVANTAGES

- NOx emissions below 30 mg/Nm³(15ppm) (Emission Control Mode)
- Fast load ramp (Up to 40 MW/min)
- Improved stability in low load operation (Emission Control Mode)
- Full Power Output (Power Mode)

Technical Specifications

The New VeLoNOx™+Dual Pilot Burner retrofit package consists of:

- Supply of a complete set of new axial burners
- Control System Firmware upgrade
- Enhanced Diagnostic System, including:
 - Enhanced humming monitoring system
 - New pressure transducer positions
- Commissioning, tuning and optimization activities on field

Burner Features

- VeLoNOx™ Burner able to reduce NOx emissions below the 15ppm limit
- Dual pilot line used for Power Output maximization at Base Load
- Overall dimensions perfectly consistent with the previous technology (can fit with all existing configurations)
- Improvement of the response to grid frequency requests
- Also available in the Dual Fuel (Oil+Gas) Configuration



Performance

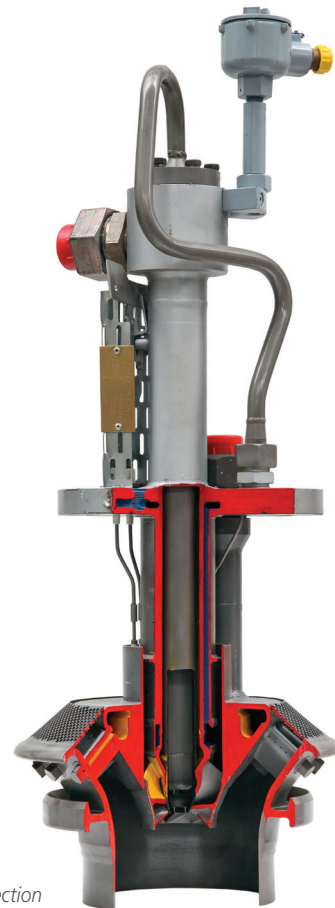
The new system, in the Emission Control Mode, allows operators to keep under control both NO_x and CO pollutant emissions to respect the most stringent requirements across Europe:

NO_x < 15ppm guaranteed (@ 15% O₂, dry gasses)

CO < 20ppm guaranteed (@ 15% O₂, dry gasses)



AE94.3A: Burner Head (std / veloNO_x)



AE94.3A: Burner Longitudinal Section

For more information and to reach our sales Team, please go to www.ansaldoenergia.com

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