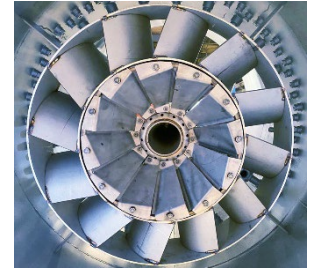


COMBUSTION / BURNER BUSINESS

CASE STUDY #012021-3



TOTAL TURNKEY VISION-ULN RETROFIT SOLUTION

CUSTOMER: *Major Caribbean Oil Refinery*

CHALLENGE: Customer was restarting a refinery with (2) 300,000 PPH multi-burner boilers firing refinery gas and propane. The existing boilers and burners were more than 40 years old and did not meet current emission standards.

The retrofit project required new burners with wind box that delivered maximum reliability and fuel flexibility with 50% emissions reduction.

SOLUTION: Installation of new Victory Energy VISION low NOx burner systems that delivered and exceeded all metrics requirements outlined in the project specifications. The units were designed to fit existing burner opening with no modifications to the boiler.

The VISION burners package features included:

- **Semi pre-mix combustion for low NOx – 2 burners per boiler**
 - **New windbox with air distribution baffles and air control damper**
 - **Redundant PLC based Burner Management System**
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RESULTS: *The new Vision Burners delivered NOx emissions performance levels 20% below guaranteed contract values.*

All burners met capacity, turndown and boiler steam production requirements.
