Case Study 14

Gas Emission Reduction Furnace simulator for the Refining Industry

OBJECTIVES

- To simulate liquor burning gas discharge though a catalytic bed.
- Two stage heating of the gas to levels dictated by the operator.
- Passing it through a catalytic bed.
- Including the facility to re-cool the gas through a cooling coil.
- Fitted with full monitoring, control and logging capabilities.
- Manual to be supplied.

INTRODUCTION

As part of ongoing efforts to further improve refinery performance and quality.
Control and Thermal Engineering were asked to build a test rig to simulate the existing treatment of certain emission gases, in order to better study their effectiveness.
Control and Thermal Engineering were chosen for the manufacture due to their versatility and experience in providing process heating and cooling solutions.

The system incorporated a heating program to bring the system to temperature while purging the system continuously with N2 then moving onto the test gas.

Software control then stabilises the system and holds temperature to commence testing.

The gas then passes through an on-board catalytic bed and on to the cooling stage of the system.

The system was built, commissioned and delivered to site in very good time within 5 weeks.

For more information about our services and products contact:

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