

Oil Tanker Asia



MacDonald-Miller
FACILITY SOLUTIONS®

MacDonald-Miller Facility Solutions Industrial Boiler Group performed burner upgrades and de-rates on a large oil tanker in Asia. Originally designed to burn #6 bunker oil, they have switched to #2 Diesel and no longer need the full capacity of the steam boilers. The objective is to de-rate 50% by installing new Limpsfield burners and reusing the Autoflame controls previously installed.



THE PROBLEM

- Previous burner system had unnecessary equipment (air compressor, pilot oil pump).
- Inconsistent pump control during purge cycle.
- Previous burner was end of life.
- Inefficient combustion, increasing operating costs.



THE GOALS

- Simplify the burner system by removing unnecessary equipment.
- Achieve reliable and consistent light offs.
- Improve overall efficiency and reliability of the boiler system.
- To modernise plant room control.



THE RESULTS

- Successful installation and operation of new burners.
- Elimination of unnecessary equipment.
- Consistent light offs every time.
- Reliable spillback pressure (200 psi at 70 degrees light off).
- High turndown ratio.
- Efficient base load operation at approximately 42% firing rate.



THE EQUIPMENT

- 2 x LPO3/2930 Limpsfield Burners
- 2 x Spacer Rings
- 2 x Oil Pump Set "OP-TA2-0.75"
- 2 x Autoflame Pressure (Steam) Sensor, P/N:MM10008/U



CLIENT TESTIMONIAL

"The new equipment is operating well, and the customer received the promised result."



NEXT PHASE

Eight more Limpsfield burners are being installed as part of the ongoing project to equip four additional tankers, each with two boilers.

