

Standard burner routine checks and maintenance

Detailed below are general recommendations for routine checks and maintenance for the Limpsfield burner. These should be carried out in a safe and appropriate manner, and in accordance with any related health and safety policies. Additional checks may be required by local codes and company policy.

Further maintenance requirements may also be outlined in the following pages of this manual for specific applications.

Burner log

A log should be maintained for each burner. This should detail checks and maintenance outlined herein.

Standard checks

All burners should be subjected to a standard daily check. During this check the following should be carried out:-

- General observation of the burner during operation.
- Observation of flame through sight glass.
- Log any lockouts that have occurred since previous check (Lockout record Mk6).

The burner should be checked over monthly to ensure that all nuts bolts etc are tight.

The flame detector should be checked after a time period in accordance with local codes. This is achieved by shutting off the fuel supply and ensuring that the burner locks out, indicating a flame failure. Where firing gas this is achieved by closing off the gas supply valve. Where firing oil, this is achieved by turning off the oil pump. Standard UV detectors should be replaced after 2 years of operation.

The diffuser and blast tube within the burner should be checked monthly for indications of damage or distortion. These should be replaced as necessary.

Gas specific

The following maintenance checks should be carried out weekly:-

- Check gas pressure to ensure that this has not deviated from the as commissioned value.
- Check over burner to ensure that nuts bolts etc. remain tight.

Light Oil specific

The following checks should be carried out weekly:-

- Oil pressures at low and high fire should be checked and logged. The supplied pressure must not deviate from the commissioned values substantially.
- Check to ensure that the atomized oil does not clip the end of the blast tube at the lowest firing rates.

Oil filters must remove particulate within the oil. As a result it is important to ensure that these are replaced as necessary and do not become blocked.

The burner oil nozzle should be replaced every 6000 hours of operation.

Heavy oil specific

The following checks should be carried out daily:-

- Keep a log of oil pressures and temperatures ensuring that the delivered characteristics of the fuel do not vary substantially from the as commissioned conditions.
- Oil filters must remove particulate within the oil. Where firing heavy oil Limpsfield's recommended pump set arrangements must be adhered to. In doing so, the duplex filter baskets must be cleaned on a daily basis, and necessary measures taken to ensure that other filters used within the pipelines remain clean and unblocked.

Heavy oil preheaters should be cleaned after an appropriate time period to maintain efficiency and prevent blockage.

The boiler fire side should be cleaned after an appropriate time period to maintain heat transfer efficiency (consult boiler manufacturer).

The burner nozzle should be replaced after every 2000hrs of operation.

In addition to the routine maintenance outlined, it is essential that a recognized Limpsfield representative services burners annually or as necessary.