



contract report



Customer:  Freescale Semiconductor

Location: Austin, Texas, USA

Boiler Type: Cleaver brooks 700hp

Burner Model: LCNO100

Fuels: Natural Gas & No.2 Oil

Fuel Savings: \$46,500 annually

Freescale, a worldwide leader in Semiconductor production approached Limpsfield in 2006 interested in updating their older Cleaver brooks burner and retrofitting the high efficiency Limpsfield burner.

The Limpsfield - Cleaver brooks retrofit solution offers the customer a simple and cost effective solution to older unreliable cleaver brooks burners.

The way the Limpsfield burner is retrofitted to the Cleaver brooks boiler, means that the existing combustion air fan can be re-used.

The customer's initial requirements were:

- To increase the reliability of the boiler plant
- To increase boiler plant efficiency
- To reduce fuel costs
- To reduce harmful emissions

After discussing the above requirements with the customer, Limpsfield projected the below performance figures:

- Reduce O2 levels from 8-12% down to 3%
- Reduce annual gas consumption by 10%
- Reduce electrical consumption by 5%



E.G.A.		
ON LINE VALUES		
O ₂	2.3	%Vol
CO ₂	10.4	%Vol
CO	00	ppm
NO		ppm
SO ₂		ppm
Exhaust	309	F
Ambient	87	F
ΔT	222	F
Eff	85.1	%

After a complete burner retrofit, the following results were achieved:

"Saving \$46,500 annually on fuel savings alone!"

- O2 levels less than 2.5% throughout the complete firing range
- Gas consumption lowered by 6 cubic feet per hour or \$46,500 annually
- Electrical consumption lowered by \$12,000 annually by using a variable speed drive to control the speed of the forced draught combustion air fan.



For more information on the Limpsfield burner range, please do not hesitate to contact us.

Website: www.limpsfield.co.uk
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