



STERLING COMBUSTION

FUEL SAVINGS

It's no secret that fuel costs are on the rise. In the last ten years, the price of natural gas has doubled, while the price of No. 2 heating oil has more than tripled.

The impact to your business is made worse when your burners and boilers are inefficient due to the use of outdated mechanical cams and linkages. These systems aren't accurate throughout the firing range of the burner and can't respond quickly enough to temperature or pressure changes demanded by the process.



Such a system is so inefficient, you may as well be burning cash.

Sterling Combustion will significantly reduce your fuel costs by upgrading your burners and boilers with an Autoflame microprocessor-based linkageless control system retrofit.



Autoflame linkageless controls with variable speed drives and independent servomotors adjust the air-to-fuel ratio and the burner firing rate to precisely match the required temperature or pressure setting of the boiler. Optimum combustion efficiency is constantly maintained regardless of load and environmental changes.

Your annual fuel cost savings will typically pay back the upgrade cost in less than a year.



Boiler / Boiler Room Rating		Application	Annual Gas Use Cubic Meters	Typical Upgrade Cost	Predicted Annual Fuel Savings	Accumulated Fuel Cost Savings				
BHP	MBH					Year 1	Year 2	Year 3	Year 4	Year 5
50	1,674	Process	318,550	\$15,000	\$8,919	(\$6,081)	\$3,106	\$12,569	\$22,315	\$32,354
		Heating	110,750		\$3,101	(\$11,899)	(\$8,705)	(\$5,415)	(\$2,027)	\$1,464
200	6,696	Process	1,274,200	\$17,000	\$35,678	\$18,678	\$55,426	\$93,276	\$132,262	\$172,417
		Heating	443,000		\$12,404	(\$4,596)	\$8,180	\$21,340	\$34,894	\$48,855
300	10,044	Process	1,911,300	\$18,000	\$53,516	\$35,516	\$90,638	\$147,414	\$205,893	\$266,126
		Heating	664,500		\$18,606	\$606	\$19,770	\$39,509	\$59,841	\$80,782
400	13,392	Process	2,548,400	\$32,000	\$71,355	\$39,355	\$112,851	\$188,552	\$266,524	\$346,834
		Heating	886,000		\$24,808	(\$7,192)	\$18,360	\$44,679	\$71,787	\$99,709
500	16,740	Process	3,185,500	\$33,000	\$89,194	\$56,194	\$148,064	\$242,690	\$340,154	\$440,543
		Heating	1,107,500		\$31,010	(\$1,990)	\$29,950	\$62,849	\$96,734	\$131,636
600	20,088	Process	3,822,600	\$34,000	\$107,033	\$73,033	\$183,277	\$296,828	\$413,785	\$534,252
		Heating	1,329,000		\$37,212	\$3,212	\$41,540	\$81,019	\$121,681	\$163,564
800	26,784	Process	5,096,800	\$35,000	\$142,710	\$107,710	\$254,702	\$406,104	\$562,047	\$722,669
		Heating	1,772,000		\$49,616	\$14,616	\$65,720	\$118,358	\$172,575	\$228,418

Retrofit systems for boilers rated at 400 BHP and higher would include continuous flue gas analysis and variable speed drive control on combustion air as a minimum.

EMISSIONS REDUCTION

Our federal government has committed to reduce greenhouse gas emissions by 6% from 2006 levels by 2012, and by 20% by 2020. Provincial governments and local utilities are following suit, so it's inevitable that industry will soon be faced with specific reduction legislation.

An Autoflame burner/boiler efficiency upgrade by Sterling Combustion will help your company meet those requirements since a reduction in fuel usage represents an equivalent reduction in harmful emissions.



OPERATING AND MAINTENANCE COST SAVINGS

During the commissioning phase of a burner/boiler upgrade, Sterling Combustion will work with you to establish an optimum performance baseline.

Since the use of Autoflame linkageless combustion controls makes it possible to accurately characterize the air-to-fuel ratio throughout the firing range of the burner, the settings are repeatable and consistent.

You'll sustain optimum performance without the need for routine maintenance and adjustments.



Sterling Combustion
Energy Efficient Combustion Systems

150 Armstrong Avenue, Units 8 & 9
Georgetown, Ontario
Canada L7G 5G8

Phone: 905-702-1604
Fax: 905-702-1605

info@sterlingcombustion.com
www.sterlingcombustion.com



ENERGY EFFICIENT COMBUSTION SYSTEMS

Your company has thousands of energy dollars hidden in the boiler room. Sterling Combustion can provide you with professionally-engineered Autoflame efficiency upgrades to reduce fuel costs, harmful emissions, operating and maintenance costs.

