



CUTTING ENERGY COSTS KEEPING GREEN



## Background

Maxsys Fuel Systems Ltd. is part of the international burner and combustion equipment manufacturing group, Selas Heat Technology Company LLC with headquarters in Streetsboro, Ohio.

In just over a decade, we have become an established worldwide company, providing fuel treatment systems proven to cut energy consumption by a guaranteed minimum of 5%. Carbon dioxide emissions are reduced accordingly. Cost savings have ranged from \$3,000 to \$30,000 per month, resulting in a payback period between 3 to 24 months.

The Maxsys Fuel System works by intrusively applying a finely calibrated magnetic field to the oil or gas prior to combustion. This produces a cleaner burn, promoting efficiency in all types of heaters, furnaces, boilers, kilns, ovens and dryers.

The Maxsys fuel technology can easily be integrated into existing combustion plant, eliminating the need for expensive equipment overhaul. Each unit is designed and built to the unique specifications of each installation. This tailor-made approach includes production of animated 3D installation drawings which optimize the savings that the System will yield.

Maxsys Fuel Systems have been used in a wide range of industrial sectors, including automotive, chemical, paper, food and beverage. Our ever broadening portfolio of customers includes many superbrands and blue chip companies, such as Ford Motor Co., Dow Chemical, Johnson Matthey and Croda, all of whom have reported a verified fuel saving of between 5% and 9.5%.

We deliver this guarantee of a minimum 5% reduction in energy consumption, and excellent ROI, at a point of ever-increasing environmental regulations which threaten businesses that fail to reduce carbon emissions with increased penalties.



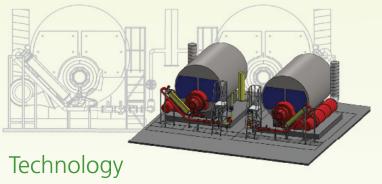


Reducing costs, lowering emissions and maximizing efficiency.

## **Benefits**

- Proven savings in fuel consumption range between 5% and 9.5%
- Ongoing monthly savings
- ROI between 3 and 24 months
- A reduction in harmful CO<sub>2</sub> emissions, which helps to satisfy stringent emissions regulations, reducing the need to purchase carbon credits
- Compatibility with all burners and easy integration into existing combustion processes
- Reduces costly equipment overhaul
- Running independently of electrical power and containing no moving parts, the Fuel Systems require no maintenance
- Manufactured to fit the individual requirements of each installation, the Fuel Systems are delivered ready to use and installed by highly trained engineers, ensuring no interference to working processes
- Turnkey project



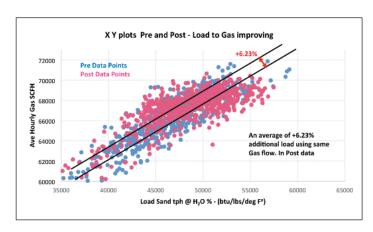


Maxsys Fuel Systems promote energy efficiency by pre-treating the oil or gas prior to combustion.

The intrusive technology is the result of more than 10 years scientific research into the effects of magnetic fields on fuel.

By applying a magnetic field, nanoparticles that would normally pass through the combustion or reduce heat transfer efficiency, by clinging to and fouling surfaces, begin to cluster together. This act of aggregation forms larger colloids, less likely to create a film deposit and compromise a plant's performance. In the combustion chamber itself they produce a hotter, more luminous flame, releasing the energy in the fuel more efficiently. How this works is dependent upon factors such as strength of the field, dwell time, type of fuel and how the magnetism is applied. Each Maxsys Fuel System unit is calibrated to suit individual requirements.

Thermal efficiency is increased through a greater use of the available fuel, meaning a reduction in that required to achieve the same production output.





## **Process**

With the Maxsys team involved at every level there is no margin for error.

For each project we provide firsthand expertise and support from the moment the order is placed, right through to the end of project analysis.

Working hand in hand with a client ensures complete communication at every stage, as we provide our cost efficient Fuel Systems to an established and rapidly expanding customer base.

At the initial project meeting, design, installation, verification requirements and timescales are finalized ready for the next phase. A qualified technical engineer surveys the site and retrieves benchmark pre data from the client in order to produce a Test Protocol to determine the level of savings. This is passed on to the client for approval.

The Fuel Systems are manufactured to the agreed specifications and installed by welding and installation specialists.

With the cost saving technology on-line, we begin to collect post data, from which we produce a final project report, verifying the reduction in fuel consumption. If required, an independent analysis and verification can be carried out by a specialist third party of the customer's choice.

