



NEW ZEALAND

*Setting the standards*

## WASTE GAS FLARES



## WINDSOR WASTE GAS FLARES



### Gas Flaring Solutions for most applications

Windsor Waste Gas Flares offer a solution to venting gas from various sources.

Utilising waste gas in process heating or power generation (gas engine) is a preferred method of disposal, but where it is impractical because of distance from a suitable site, flaring the gas is the best alternative.

A temporary flare may also be required for co-generation standby systems and during landfill construction.



### Pre-Aerated Flame Shrouded Design

The Pre-Aerated flare is used where some flame visibility from the top of the flare is acceptable and where strict requirements on oxidation of the effluent are not applied.

- It is capable of operating with a 15:1 turndown and it is ideal for start up applications where initial gas generation is low.
- As gas generation increases flare capacity is increased by increasing the extraction fan speed and bringing into service secondary and tertiary burner nozzles.
- The burners are ignited with high tension spark igniters and flame monitoring uses commercially available flame sensors.
- Windsor supply the completely pre-packaged units including extraction fan, particulate filter, moisture eliminator, flash back arrestor safety valves and burner management panel.



### Totally Enclosed Flame Design

This design is an adaption of ThermoSystems highly successful thermal oxidizer range of which there are over 40 examples in Australia and New Zealand.

- A totally enclosed flame design is used where there are specific conditions on permitted pollutants or open flames. Test points are provided for performance monitoring.
- Incorporates design features and operating parameters as for our Pre-Aerated Flame Shrouded design.

Each system is custom designed to meet specific customer requirements.

For further information on Windsor Gas Flaring solutions, please contact us on +64 4 232 8080.



## ENGINEERING EXPERTISE & EXPERIENCE

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Over the last 30 years Wellington based Windsor Engineering Group has established a strong reputation for high quality design and engineering solutions, both in New Zealand and overseas. Our core capabilities include:

- Innovative Mechanical and Electrical Engineers with a broad range of experience.
- Practical Designers with the ability to translate ideas into economic solutions.
- Dedicated Project Managers who co-ordinate the resources of Windsor and associated companies to provide complete turn-key solutions.
- A manufacturing facility with highly qualified staff and specialist production technology.
- A dedicated servicing and maintenance team.
- The ability to work closely with the customer to deliver the right solution.
- Windsor has the engineering and business skills to build prototypes and commercialise new technology or manufacture under licence.



*Windsor has significant experience in a wide range of industries including:*

- Wood processing
- Dairy processing
- Food industry
- Meat processing
- Oil and gas
- Chemical
- Concrete
- General engineering



*Examples of the types of solution Windsor provides include:*

- Drying kilns and ovens for a variety of applications.
- Filtration systems to control dust and fume emissions and meet regulatory levels in industries from food (dairy, grain and seed and flour milling) to chemicals, wood cement and many others.
- Pneumatic conveying of particulate material of virtually any description.
- Specialist noise control solutions to satisfy increasingly stringent regulations.
- Heat exchangers for many industrial applications, including dairy and food production, pulp and paper industry and energy saving systems.
- Electronic process control systems.
- Aluminium and stainless steel fabrication.
- Special purpose machinery design and fabrication.





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