

Modernizing Energy Sector

## Application of Micro Gas Turbine in bakery

Access to reliable and cheap electricity has been a challenge in South Africa from long time ago. Power intermittency affects baking industry as well. Turbo Green Burner has been developed to produce flameless heat for use in bakeries while also generating electricity, which can be used within the bakery system or exported back to the electricity grid. It features a digital burner management system to ensure more efficient fuel consumption and greater reliability throughout the product service life. The Fuel it consumes to make electricity is significantly cheaper per unit than electricity purchased from the grid, leading to a reduction in both energy bills and carbon emissions. This novel burner features a user-friendly programming and control function.

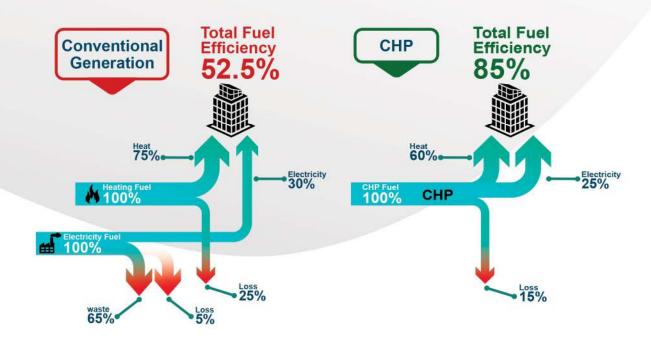
Turbo Green Burner has a low emission multi-fuel combustion chamber allowing it to run on natural gas, Diesel, Bio-Gas, LNG and kerosene, which will increase the adaption rate and avoid the need for specific fuel, subject to availability. An integrated battery pack and capability to run on multiple types of fuel has made the product a completely grid independent system. Being grid independent makes it a solution for remote locations, providing power and heat to pave the way for performing industrial activities in locations with limited access to power and gas grid.

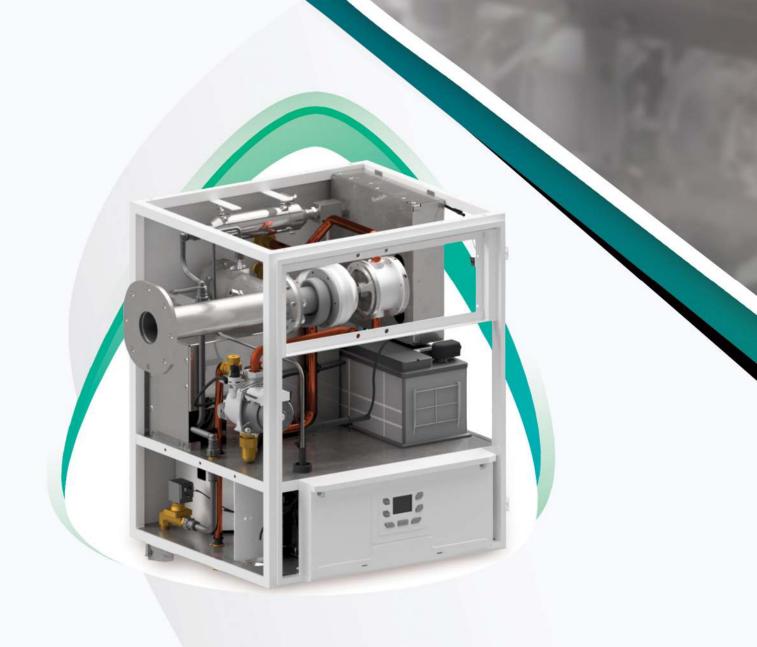


## Technical Specifications

Thermal output	60-200	kW
Electrical output	3.6-12	kW
Exhaust gas temperature	750	°C
Total efficiency	80	%
Type of fuel	Natural Gas /Diesel/Bio-Gas/LNG/kerosene	mm (ln)
Water connection	25 (3/4)	mm (ln)
Electrical output	230 / 50	VAC, Hz
Weight	75	kg
Dimensions (h x w x d)	650 x 550 x 450	mm
Meantime between service	5800 (1)	Hours(Year)
CO (Natural gas burning)	1000	ppm
NOx (Natural gas burning)	100(30)	Mg/kWh(ppm)
Ignition system	Full sequence automatic spark ignition	

## Conventional Generation vs CHP





## **Contact Information:**

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