

A Mobile, Small Scale Combustor (Waste to Energy ORC Optional) For Thermal Treatment

FW has adapted a 80-year old, well-established and highly-efficient combustion technology and made it small-scale, mobile and affordable.

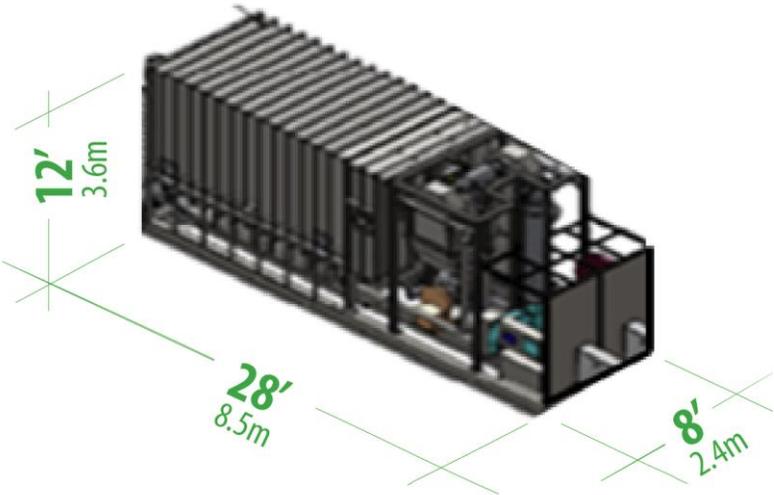
- * **Outstanding combustion efficiency** thanks to its control system and an ultra-high temperature.
- * **Minimal ash and lower emissions** thanks to the uniform heat distribution in the combustion chamber. An in-built pollution abatement equipment further reduces emissions.
- * **Less expensive to operate and environmentally friendlier** because it doesn't require supplemental fuel, as oppose to competitors who require a constant source of fuel.
- * **Low maintenance and labour**
Accepts waste with high moisture content, up to 35%
- * **Waste-to-Energy net 200 kW ORC system (Optional)**

Please Contact:

Rob Steir
Rob@FrontlineWaste.com
(212) 579-1781



The Thermal Treatment: Fluidized Bubbling Bed Combustor



Combustor Model FW-20

FW-20 prototype: 1,000 hours with excellent combustion and air emissions results

MAIN FEATURES

Feed	Combustible waste including plastics, wood and paper
Process	Combustion
Main equipment	Fluidized bubbling bed combustor
Special features	Controlled feeding Containerized and mobile High to ultra high operating temperature (850-1300°C) Self-fueling (no supplemental fuel)
Main product	Exhaust heat (460-600°F / 240-315°C)

PERFORMANCE CHARACTERISTICS

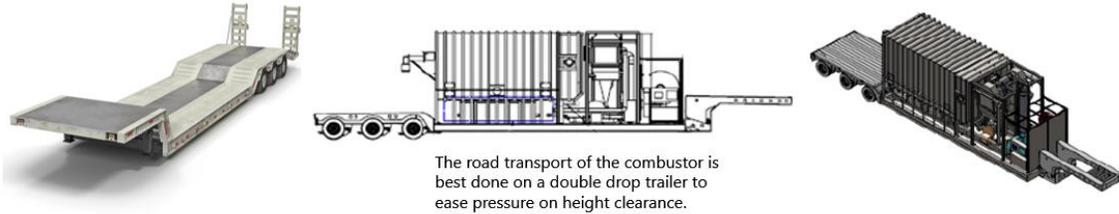
Treatment capacity	0.8 tons/hour / 20 tons/day / 7,000 tons/year
Waste moisture content	Up to 35%
Operating power	25 kW to run fans and control unit
Capacity factor	92% (in operation 24 h/d / 336 d/y)
Emissions	Well below EU and EPA limit values



Setup/breakdown in 4-6 hours. Wheel-Set attaches to semi-trailer truck. Self-fueling after startup

Combustor & ORC Mobility & Transportation

Road: Double Drop Trailer



The road transport of the combustor is best done on a double drop trailer to ease pressure on height clearance.

Shipping: all equipment fits in 3 cargo containers



40' open top container for the combustor transport.



20' standard container for the fuel-feed system and various components.



40' open top container for the ORC.

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ADDITIONAL PERFORMANCE CHARACTERISTICS

Starting fuel	Minimal amount of diesel for cold start
Supplemental fuel	Not required. Self-fueling system
Noise	50 decibel approximately
Ash	< 3x 55 gallon drums /month at full operation

O&M

Maintenance	Lubrication of parts and motor bearings done on a scheduled basis. Sand replacement as required
Operation	1/2 people depending on situation and use
Design life	20 years
Shipping	Ships from California, USA