

CONVERT WASTE TO ENERGY

WITH KINECTRICS PLASMA ASSISTED GASIFIER (PAG)

ENVIRONMENTALLY FRIENDLY, ECONOMIC, EFFICIENT, SAFE & CONVENIENT



Kinectrics' advanced process provides an economical and environmentally-friendly solution to a growing problem

The industry challenge

- Disposal of
 - High-calorific value waste streams and the conversion of recovered energy to electricity
 - Plastic blends that cannot be recycled
 - Non-recyclable / non-reusable metal wastes
- To reduce or eliminate
 - Mixed waste storage waiting for proper disposal
 - Potential liabilities by disposing of stored wastes.
 - Storage costs and liabilities
- To offer economical and environmentally-acceptable alternatives to landfill as a disposal option

An advanced, effective solution

Kinectrics' Plasma Assisted Gasifier (PAG) can destroy up to 4 metric tonnes / hr. of high-calorific value solid waste, converting the solid waste into a syn gas that can be used for the generation of electricity. Kinectrics' waste-to-energy conversion system can be used with plastic blends that cannot be recycled in common industrial processes, as well as complex electronic wastes containing polymeric materials, precious metals, silica and other difficult-to-process solids. The PAG renders recyclable metals and, an inert slag along with a syn gas that can be compressed and fed into an internal combustion engine or gas turbine to generate electricity.

Kinectrics' PAG system can be commercially designed to meet clients' specific throughput requirements and, be built as a fixed or transportable system.

Complete services

The PAG unit is optimized for a feedstock of non-recyclable plastics and Styrofoam, and also has the ability to operate on a variety of feed stocks including sorted municipal solid waste (MSW), agricultural waste, de-watered sludge, and chipped tires.

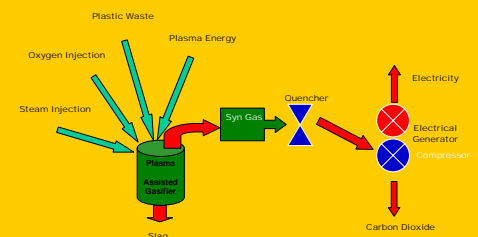
Proven Technology

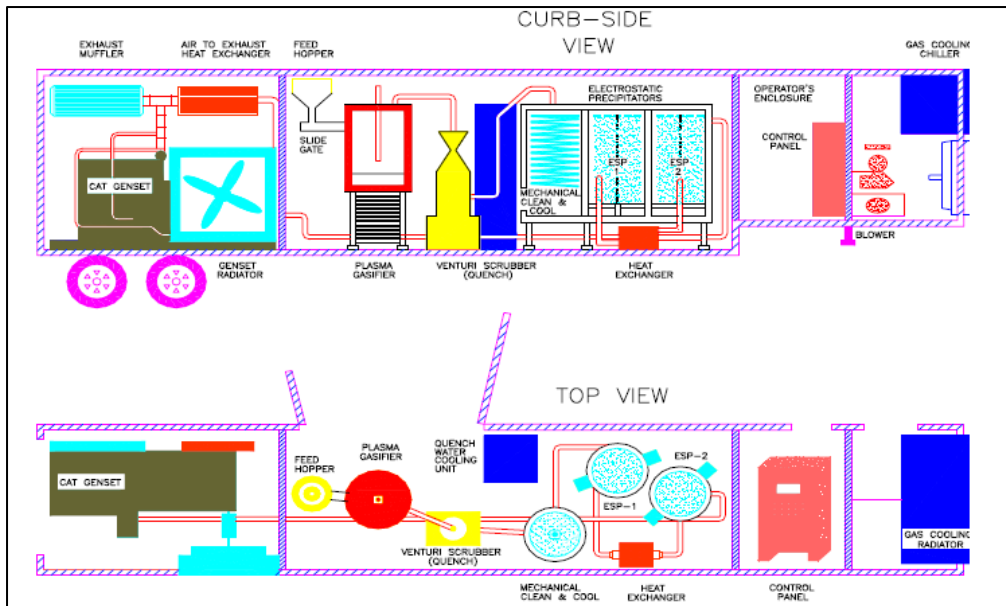
Kinectrics provides a full range of services for the disposal of hazardous chemical and non-recyclable waste.

Kinectrics has developed an advanced Plasma Assisted Gasifier to convert high-calorific value solid waste into electricity.

The high temperature created by the plasma arc in the reaction chamber converts the molecular structures in the waste stream into their atomic elements. An oxygen-starved environment induces the formation of a carbon monoxide-rich gas that can then be used in an internal combustion engine or gas turbine to generate electricity.

Put Kinectrics' unique expertise and experience in waste management to work for you today.





The Kinectrics' PAG system is fully instrumented and designed to operate with minimum labour involvement. The above diagram illustrates a transportable unit that requires only two operators to enable safe and optimum processing.

Value-added technology

This environmentally-friendly approach for the disposal of complex solid wastes that are currently stored or disposed of in mixed landfills can be converted into usable electricity using Kinectrics' Plasma Assisted Gasifier system.

The high-temperature achieved in the plasma vessel ensures that any toxic contaminant originally in the waste stream can be efficiently and completely destroyed or converted to a friendly compound.

Comprehensive client benefits

Economical

- Converts a passive-waste into energy
- Eliminates or reduces the high cost of the storage or mixed-waste landfill
- Eliminates additional expenditures for the purchase of the electricity produced

Environmentally-friendly

- Minimizes volume of conventionally disposable post-production by-products (non-toxic)
- Produces essentially zero airborne emissions
- Enables the recovery of metals that may otherwise become landfill
- Operates safely and reliably

Convenient

- Convenience of on-site treatment with mobile or fixed facilities
- No special site preparation when using mobile systems
- Small space requirements
- Short set-up and demobilization times

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