250kW ADVANCED GASIFICATION PLANT
CREATING CLEAN ENERGY THROUGH SUSTAINABLE, ON-SITE WASTE CONVERSION
**A GREEN SOLUTION SUITABLE FOR A DIVERSE RANGE OF WASTE**

As businesses and organizations of all types look to meet their sustainability goals, finding effective and affordable ways to manage waste disposal becomes a priority. The innovative advanced waste gasification system from Lockheed Martin using Concord Blue technology provides an affordable, environmentally friendly solution. It’s designed to handle a variety of waste – from municipal solid waste to commercial and industrial waste and more. The system converts waste to raw syngas. Once cleaned, the syngas is suitable for an internal combustion engine to generate electricity, for conversion to biofuels or for hydrogen production.

The advanced gasification system is flexible and scalable, making it an option for a wide variety of industries. Systems can be incorporated into an existing facility. The modular plant design allows much of the plant elements to be built offsite and requires as little as a one-half acre of land. In addition to saving money on waste disposal costs and transportation, the closed-loop system requires no additional power once the conversion process begins. Power can be used at the site or sold to create an additional income stream.

**END-TO-END SUPPORT**

With decades of experience in the energy generation market, Lockheed Martin has the expertise needed to create tailored solutions that safely, affordably and effectively dispose of waste. The team will work with you throughout each phase of the project—from conducting project feasibility studies, through providing engineering, procurement and construction support, to handling lifecycle management needs.

**250kW SPECIFICATIONS & FEATURES**

<table>
<thead>
<tr>
<th></th>
<th>Biomass (Wood Chips)*</th>
<th>Municipal Solid Waste*</th>
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<tbody>
<tr>
<td><strong>Compact</strong></td>
<td></td>
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<tr>
<td>Land Specs</td>
<td>0.5 acre land required (assuming off-site wood chipping)</td>
<td>1 acre land required (assuming on-site feedstock handling)</td>
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<tr>
<td><strong>Utilities Required</strong></td>
<td>Propane/Natural Gas Nitrogen Water/Water Treatment/ Waste Water Treatment Cooling Water Compressed Air Biodiesel</td>
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<tr>
<td><strong>Flexible</strong></td>
<td></td>
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<td>Feedstock Consumption (tons/24 hours a day)</td>
<td>~9.2</td>
<td>~7.5</td>
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<tr>
<td><strong>Efficient</strong></td>
<td></td>
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<tr>
<td>Raw Syngas Production (scfm at 0°F and 1 atm)</td>
<td>240</td>
<td>240</td>
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<tr>
<td><strong>Green</strong></td>
<td></td>
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<tr>
<td>Emissions</td>
<td>Meets U.S. and EU standards</td>
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<td>Discharge Water</td>
<td>Meets local sewage discharge requirements</td>
<td>Meets local sewage discharge requirements</td>
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<tr>
<td>Waste – Ash (lbs/day)</td>
<td>~310</td>
<td>~740</td>
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*Quantities may vary based on actual feedstock characteristics.