

Evergreen Engineering is at the forefront of the torrefaction industry and the utilization of residual materials for cleaner energy. We have worked with a number of clients (all of whom wish to remain confidential) on projects that move the industry forward. Below is a list of just a few of our torrefaction-related projects. Put our expertise to work for you and rest assured you are dealing with a leader in this growing industry.

Retort Burner Replacement

- Engineering and design for replacement of start-up retort burners, including fans, ducting, gas train and piping to burners, power and control wiring, burner control panel, and electrical one-lines for motor control centers.
- Documentation of process flow equipment in retort area from the receiving equipment to the furnace and from the char process equipment to the char storage silos.

Torrefaction Pilot Plant

- Preliminary process flow diagram
- Safety issues
- Process mass and energy balance check calculations
- Process review and recommendations
- Preliminary pilot plant layout
- Site test witness

Dryer Outlet Box Replacement

- Replacement for dryer outlet box, including access openings on each side of the box, utilizing existing seal ring between the box and the dryer drum.
- Detailed drawings for outlet screw conveyor trough and screws.

Torrefaction Pilot Plant

- Pilot torrefaction plant that converts client-specific biomass into briquettes.
- Capital cost estimate
- Block flow diagram, P&IDs, site layout drawings and elevations
- Electrical design and controls system design
- Electrical motor location
- Electrical grounding plan for equipment
- Overall schedule
- Construction drawings



Modified Burn Box Pyrolysis System

- Conceptual process design development
- Heat/Mass balance calculations

