



LOW POWER PLASMA TORCH WASTE VITRIFICATION TESTING

Project Name	Minigun Plasma Torch System for Small Waste Vitrification Reactor
Customer	University of Florida, Department of Environmental Engineering Sciences
Location	Gainesville, Florida, USA
Delivery	2010
Products/Services	MINIGUN Plasma Torch, Engineering Services
Capacity	25 kW
Feed	Argon Gas
Energy	n/a
PyroGenesis Role	Design, fabricated, assembled and delivered complete Minigun plasma torch system, including adapting flange, water cooling skid for torch AND reactor. Start-Up Services provided as well.
Other stakeholders	n/a

The university had received a small used furnace for performing experiments with waste at high temperatures, but they did not have a working plasma torch. After consulting the team, PyroGenesis recommended supplying a 25 kW Minigun Plasma Torch System, with touch screen interface, control and gas cabinets, a power supply, and a water-cooling skid. The torch was also designed with an adaptive flange specific to the reactor port where the torch would be fitted. A change order was issued midway in the project to scale up the cooling skid to provide water cooling capacity for the reactor as well, a change which was easily integrated into the project.

The project was delivered on time and within budget. A technical professional was on hand for the start-up of the system. Fully illustrative installation, operating and maintenance manuals were also provided.

