PyroGenesis designed, fabricated, and installed a pilot plant used to demonstrate a plasma processing technology which belonged to the customer. Specifically, the process involves the production of titanium metal from titanium fluoride (TiF3) through the disproportionation reaction. The customer used our team and its development services specifically to prove out the viability of the technology.

PyroGenesis was responsible for the whole development process of the plasma plant, from the initial concepts to design and fabrication. Working closely with its client, PyroGenesis fabricated, assembled, delivered and commissioned the pilot plant on time and within budget and obtain positive results in just a few weeks of testing.

The system used three 120 kW argon plasma torches (APT type) and graphite lined that allowed to easily reach very high processing temperatures, in excess of 1500 °C.