

GRAPHALLOY® Finds Its Place In Renewable Energy

How Can GRAPHALLOY® Help the Green Revolution?

GRAPHALLOY bearings are helping to solve the world's energy needs. The advantages of alternate power sources are well-documented. However, because of the extreme nature of the environments required to generate power, it often becomes impossible to use traditional bearings. For years, Graphite Metallizing has been supplying products to companies involved in the production of clean, renewable energy. GRAPHALLOY has proven to be tough enough for these applications.

Here are a few examples:

Tidal power provides an inexhaustible source of renewable energy. A company in New England was seeking low maintenance bearings for a turbine shaft suspended forty feet below the ocean surface. As the tides move in and out, the turbines spin and generate power. GRAPHALLOY bearings proved ideal for this



application because they operate successfully in submerged conditions and tolerate abrasive environments like salt water.

Geothermal power offers an unlimited source of non-polluting power. GRAPHALLOY provided a solution to the largest geothermal power field in the world by developing a special grade bearing for this severe service. After 25 years, GRAPHALLOY bearings continue to be a critical component of geothermal power generation.

Solar power has proven to be the "ultimate" in renewable energy. GRAPHALLOY bearings are being used in this high temperature application allowing panels to slowly follow the sun while generating high temperature steam.



Biodiesel power involves the conversion of bio-waste into fuel. High temperature and an inert atmosphere can convert bio-mass and used cooking oils into biodiesel fuel.



Standard bearings fail in this hostile environment. To solve this problem, the engineers at Graphite Metallizing developed a special high temperature grade of GRAPHALLOY and a special mounting to house the bearings