

EnviroGear Pumps Save Automotive Plant \$14,000 per Year on Resin Transfer

World Leading Performance Coatings Manufacturer

EnviroGear pumps save automotive paint plant \$14,000 per year on resin transfer and provide internal rate of return (IRR) of 42%.

Challenge

A leading automotive paint facility initiated a project to improve the reliability of a resin transfer pump. The pump service was critical in delivering fluids to the production area. The objective was to minimize repetitive maintenance costs from leakage of product through the seal of an existing lobe pump.

Frequent pump seal failures resulted in high maintenance, production, and environmental costs. The pump seals failed repetitively and occasionally as often as once every three weeks. Different types of seals were used, and none proved effective in solving the problem. The pump was nicknamed “the volcano pump” because of the lava-like formations of spilled product that formed around the pump.

The existing pump failures increased production costs and caused production downtime. When the pump seal failed, maintenance time had to be scheduled for the pump repair. Meanwhile, operators had to draw the resin out of the vessel into the totes manually, and then pump the resin out of the totes into the mixing vessel. To ensure correct volumes of the resin, the vessel had to be weighed.

Furthermore, the pump was considered “a housekeeping nightmare” because the pumped resin was combustible and when spilled posed a worker safety hazard.

Solution

EnviroGear Pump worked closely with this customer team to size and configure the appropriate EnviroGear seal-less pump for resin transfer service. The EnviroGear pump model S1-82-SS seal-less gear pump was selected. EnviroGear Pump offered technical support 24/7 and guaranteed immediate response in case of pump problems.

Results

EnviroGear pump has been in service since June 2007. During that time, the project goals of reducing maintenance repair costs, reducing preventive

maintenance costs, reducing production downtime, and eliminating environmental emissions from seal leaks have been achieved.

According to the customer, the payback period for the project was 3 years, and the IRR was 42%. The plant has been able to decrease pump-related fixed cost by \$14,000 per year. Furthermore, the project was completed at 30% under the authorized budget.

“We really appreciate the fact that EnviroGear Pump is not just a product, but a company with a great philosophy that delivers on its promises. We have used EnviroGear pumps on multiple services and are now moving to standardize on them for the appropriate applications. In the case of our resin pump, we have not had any maintenance or environmental problems since July of 2007. With a seal-less pump, you just don’t have the maintenance PMs.”

- Project Engineer



PSG
22069 Van Buren Street
Grand Terrace, CA 92313-5607 USA
P: +1 (909) 422-1731 F: +1 (909) 783-3440
envirogearpump.com

