

## ProSmart Prevents Thrust Bearing Failure Model 3600

One of our power customers recently installed a between bearing multistage model 3600 pump. Within the first three months of operation they experienced two thrust bearing failures. To assist in troubleshooting the problem, the IP warranty services group installed a ProSmart Condition Monitoring System. This system included sensors to measure bearing temperatures, ambient temperature, and vibration. The measured data was visible with the ProSmart website and provided real-time data and high-alarm capability.

Hours after the unit was installed an alarm was received showing thrust bearing temperatures rapidly approaching 210°F and ambient temperatures within the pump house of 127°F. A call was made to the plant operators who reported that during a shift change several hours earlier, the pump house door was closed. Review of the trended ProSmart data shown below establishes a direct correlation of ambient temperature and bearing temperatures. This data was provided to our customer with a report of our findings. A vent in the pump house was installed to reduce the ambient temperature and the pump has been operating trouble free ever since.

