



Does the reliability of your machinery result in greater business productivity?



Ninety percent - 90% - of power quality issues are caused by the operation of your own equipment.

The advantage of the EP Power Performance System is its unique ability to absorb the harmful transient surges and high frequency noise rather than returning these damaging anomalies back into the ground or connected electrical system.

EP Products Specified:

EP-2000 Field Protection
EP-2500 Switchgear Protection
EP-2700 High Frequency Filtration
EP-2750 Ground Filtration



STAR OF THE WEST, Michigan

The Situation:

Star of the West is a highly automated industrial flour mill which was experiencing increased maintenance costs associated with their motors and controls, which make up the bulk of their operation. These problems were leading to significant production losses due to the effects of unscheduled downtime and maintenance. Coincidentally, **Star of the West also had a desire to seek out technology that would allow their assets to enjoy a longer production lifecycle.**

The EP Solution:

The mill installed EP-2500 devices on the main service entrances, EP-2000 and EP-2700 devices across the branch distribution network and covered the motor control center (MCC) that fed a motor farm in the mill. The considerable electronics volume in the facility was in need of a better ground reference, so the product mix also included EP-2750 ground blocks to remove high frequency resonance in excess of 3 kHz in the grounding grid. Prior to installation, the motors were tested for current operating characteristics. The motors were tested again post-installation.

The Result:

The mill received immediate returns based on their initial buying criteria: Greater asset availability, lower maintenance and repair costs, and extended equipment lifecycles. The CEO of the company, who is also a CPA, noticed a significant efficiency increase in his bushels per kWhr financial analysis. Based on this efficiency gain, he reviewed the post-installation motor analysis and found that by removing high frequency resonance from conductors within the system and motor windings, there was a decrease in slippage between motor line shafts and rotating magnetic fields between 40% and 75%. In many cases after installation of the EP equipment, the same motor was doing the same work under the same load at ½ the horsepower. The motors ran cooler which bodes well for equipment lifecycle extensions. The information piqued the interest of the CEO, so he calculated out the reduction in energy consumption post-installation of the EP products. The numbers produced by the flour mill indicated that the total equipment costs would realize an ROI of approximately 9 months. This information was based solely on energy efficiency. The Star of the West has 6 mills and have committed to outfitting all of their mills with the EP product to enhance operations and lower operational costs.