www.ep2000.com • 800.500.7436

Environmental Potentials

Power Quality For The Digital Age

EP WAVEFORM CORRECTION TECHNOLOGY

EP's Patented Technology:

- Tracks and Removes distortions throughout the Waveform
- Constantly Removes Frequency Noise from Voltage and Current
- Integrates Surge Removal and Noise Filtration
- Converts Power Pollution into Heat
- Upgrades the Electrical Environment

The EP System Will:

- Increase the Lifespan of Electrical Equipment
- Increase the Performance of Electrical Equipment
- Prevent Disturbances in Computers, Controllers and Motors
- Prevent Malfunction and Downtime
- Reduce Operational Maintenance Costs
- Reduce Wasted Energy
- Remove Ground Loops
- Reduce Electrical Losses

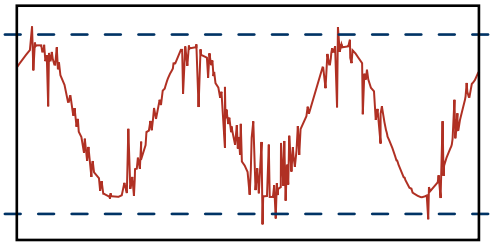
Clean power is vital to the performance
and productivity of your business.
EP waveform correction technology is the Solution.

POWER POLLUTION

The rapid advancement of industrial technology—programmable logic controllers, variable frequency drives, robotic material handling, electronically commutated motor, and controls & instrumentation—has increased productivity and efficiency to new levels.

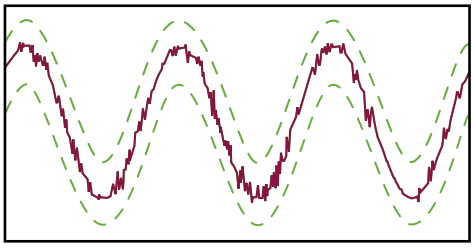
However, the proliferation of electronics, computers and digital equipment is creating pollution on the waveform. The processes of rectifying AC to DC, and inverting DC to AC, are responsible for generating 85% of power pollution.

Waveform Correction Technology

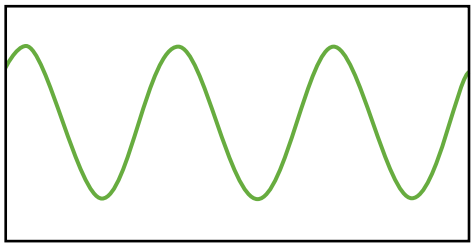


Pollution occurs everywhere on the waveform.

Typical products work within a specific voltage envelope or filter out only specific frequencies leaving the majority of the damaging pollution on the waveform



EP's patented waveform correction technology tracks the waveform removing pollution from every angle.



EP Waveform Correction Technology delivers a waveform as sinusoidal as possible to the equipment ensuring optimal performance.

FILTRATION

Proper filtration is the only way to eliminate power pollution. EP's patented technology is the industry's most advanced filtration system available.

EP is designed to respond to a voltage and a frequency it constantly tracks the waveform filtering impurities as they enter. Facilities filter air, water and fluids while ignoring the heart of production, **electrical power!**

HYBRID DESIGN

Even though filtration is essential to clean power, protection is still necessary. Each company is responsible for protecting its equipment. The EP-2900, EP-2800 and EP-2500 are capable of surviving over 1000 lightning category surges (IEEE C3 surge category). The EP-2000 was tested with intermediate high-energy surge (IEEE B3 surge category) over 4000 times with no noticeable degradation in performance. EP is committed to using only the highest quality components in the manufacturing process.

THE CLEAN POWER DIFFERENCE

A healthy electrical system is essential for equipment reliability and return on investment.

EP waveform correction technology removes all unwanted power pollution from the waveform and converts it into heat.

Clean power will significantly reduce wasted energy, by eliminating skin effect, proximity effect and eddy currents.

Good power quality is impossible without removing AC power disturbances. No other power quality products remove pollution from the waveform. EP's patented technology absorbs and dissipates this pollution and is the first significant power quality advancement in more than 30 years. All other protectors and filters simply divert transient energy/noise to ground or neutral, which is the major cause of ground loops.

Transient energy/noise circulates throughout the electrical system until it finds a return path to its source. Even worse, is that the sensitive electrical equipment that protectors and filters are supposed to protect from power pollution is actually causing the pollution.

Most transients are represented as frequencies in the 25kHz range, but can be as fast as 90kHz. These frequencies are a major contributor to skin effect, proximity effect and eddy currents.

COMPLETE SYSTEM COVERAGE

Electronic devices such as computers, ballasts and industrial control circuits like VFD's generate approximately 85 percent of power disturbances. Most power quality equipment is only designed to protect the main service from the 15 percent of power quality problems that begin from external sources.

EP Waveform Correction Technology is designed to protect facilities from 100 percent of power disturbances. The integrated modular design allows for easy placement where filtration and protection are needed most.

The EP System is part of a total facility protection strategy encompassing everything from the meter to point-of-equipment, including AC, DC, communications and security.

Whether it is main service, switchgear, motor controls, individual equipment or communication lines, the EP System will increase equipment performance, reduce wasted energy and protect expensive equipment.

EP's patented waveform correction technology is the most advanced system in the industry. It has the unique ability to remove frequency noise generated by nonlinear loads. EP is the only product that tracks, absorbs, filters and dissipates without shunting to ground. The EP System completely eliminates frequency noise power pollution, preventing ground loops and common mode disruption.

EP Waveform Technology is manufactured in the United States by Environmental Potentials, Inc. and has a distribution network spanning across the U.S. and seven other countries. Please visit www.ep2000.com for sales and distribution.