



USES[®]

AC Power Conditioning System...

Power Quality

Protection

Savings

**PERFORMANCE
GUARANTEED!**

*What's the
best thing to
put between
You and your
Electricity Bills?*



**USES® ...
REVOLUTIONARY
POWER CONDITIONING
...THAT PAYS FOR ITSELF.**



⚡ *What is
USES® Technology?*

USES is a revolutionary "Utility Patented" power conditioning device that provides a cost-effective solution to power quality problems (costing U.S. consumers \$26 billion a year in lost revenues).

⚡ *What does
USES® do?*

USES state of the art power conditioning system supplies *computer quality power* while providing superior surge & spike protection and reducing overall consumption allowing USES to quickly pay for itself.

⚡ *How does
USES® work?*

USES senses the conditions that exist within your electrical system and attracts electrical waste and distortion **re-cycling** these as useful energy. **THE RESULT: Reduced Electricity Bills, Extended Equipment Life, Lower Maintenance Cost and Improved Overall Facility Performance.**

⚡ *What makes
USES® different?*

USES unique ability to solve so many electrical problems is due to its *Patented Shunt System*, which consist of specially wound, parallel wrap around chokes. These are oriented to couple magnetic forces generated across each electrical phase, enhancing the AC wave form and matching it to the requirements of the inductive load.

⚡ *How will
USES® help me?*

USES systems reduce the inefficiencies of transformers, motors and lighting while improving power factor which will enhance your ability to acquire more competitive "wheeling" rates, upon the deregulation of the Electric Utility Companies.



Power Quality

The Bottom Line:

*Savings combined with
extended equipment life and
reduced maintenance costs
makes USES® technology
a superior investment.*

Protection



Savings

There is no other product that solves so many power problems so efficiently!

PERFORMANCE GUARANTEED!

POWER QUALITY



USES® Complements all other energy management programs



Improves Power Factor

Through the application of magnetic chokes, USES adds capacity to the circuit. Power Factor is improved, reducing utility demand charges and improving your electrical systems efficiency.

USES eliminates the risks associated with capacitors. Unlike capacitors, USES provides a resonance-free environment. Improved power factor will enhance your ability to acquire more competitive wheeling rates.

“In addition to savings, our power factor has improved over 12%.”

Tom Penningroth, Plant Manager
Nutrena Feeds



Reduces Total Current Content Including Harmonics

Due to the wide spread use of computers, variable speed drives, and digital processing equipment, businesses are plagued with harmonic distortion in their facility's electrical system. This results in the premature overloading of the supply transformer, consequently the transformer can't respond rapidly to changing load demands. In addition, electrical hot spots, voltage waveform distortion and overloaded neutral conductors result in higher maintenance cost.

USES increases the capability of the supply transformer by reducing the current requirement and harmonic content. USES also converts some harmonic current to useful electrical energy, and improves the voltage wave form to all facility equipment.

“The Medical Foundation recently purchased sensitive laser surgery equipment which we were unable to use due to excessive voltage fluctuations, surges and spikes and high harmonic content. After installing the USES Line Rover our laser equipment is now working perfectly and well within the tolerances of safety.”

David Menendez, Facility Manager
Facey Medical Foundation, Mission Hills, California



Balances Voltage Phase to Phase

USES balances voltage across each electrical phase and increases voltage to motor loads, causing them to run more efficiently. A corresponding increase in savings is achieved when facilities have multiple motors.



MANUFACTURED BY USES MFG., INC. USA



Pure Power Systems Inc.

Authorized Dealer of USES Products



- ◆ Analysis
- ◆ Equipment
- ◆ Installation

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Surge & Spike

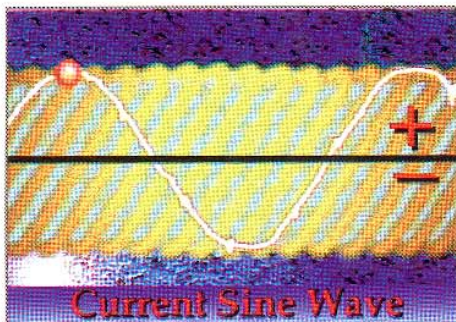
USES® provides highly effective protection. It holds voltage up during short duration brown-outs, and prevents the voltage from spiking, by rapidly absorbing energy in its magnetic choke system. USES® power conditioning – combined with superior surge and spike protection – results in significant savings by reducing maintenance costs and equipment downtime while extending equipment life.

“Since we’ve installed the USES system at a laminating plant, our customer is no longer plagued with interruptions due to surges on their PLC equipment. The current on the line was reduced by over 20%, power factor at the main meter was corrected, and the utility bill savings will pay for the unit in only 18 months. We and our customers are very satisfied with the USES equipment.”

Scott Delapp, Electrical Supervisor
Industrial Electrical Company, Modesto, California



Reduces Magnetic Fields



The effect of magnetic fields within the electrical distribution system is commonly overlooked in facility power analysis. Throughout any AC system, magnetic fields are constantly being created – collapsed – and recreated, as a function of the alternating current sine wave. With each collapsing of a magnetic field, some energy is lost.



USES flattens the current wave form – on the line side of the USES connection point. This results in a smaller magnetic field being created each half cycle, and a concurrent reduction in magnetic field losses. These incremental “half cycle savings are achieved over 300 million times per month – adding up to true power savings at the utility meter.

Note: USES® does not affect the current waveform to the load

“When I first heard about USES, I was skeptical but my curiosity made me search further. We were looking for a system which could clean up the noisiest of power. Our customers have experienced power sags, surges, brown outs, electrical noise, transient voltages, electrical shorts, etc...causing C.N.C. equipment to be interrupted. We now have data to support the USES equipment – it does everything it was guaranteed.”

Hans Trout, General Manager
M.C. Machinery Systems, Division of Mitsubishi

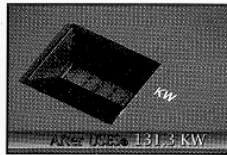
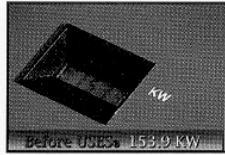
USES® helps the environment

- Each year, a single commercial model CMES-3D unit operating at 480 volts:
- Saves 59 barrels of oil, or 15 tons of coal!
 - Prevents 2.6 tons of carbon dioxide emissions!

SAVINGS



USES® savings are separate & above any other energy saving equipment



- Reduces True Kilowatt Demand
- Reduces True Kilowatt Hour Usage

At our Iroquis Fall Mill, "since installing the USES system, our power bills have been reduced by 10%."

John Reinsborough, Senior Engineering Associate
Abitibi-Price in Ontario, Canada

"At this rate of energy reduction, I estimate we will save over \$11,900 ANNUALLY.
This will yield a payback of less than two years on the USES system."

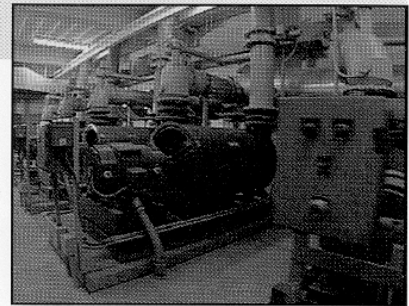
Tom Penningroth, Plant Manager
Nutrena Feeds

"After installing USES we measured several improvements at our facility:

- KWH was reduced by over 10%
- Power Factor improved from .68 to .98
- Reduced current and balanced voltage
- 10 degree temperature drop on our motors and transformers

This data is extremely good. The USES power conditioning system is well worth the investment."

Claude Bates, Facility Manager
U.S. Post Office, Nashville, Tennessee
International Airport



Get Your Business Ready for Wheeling...

"Wheeling" relates to the purchase of electricity from suppliers other than a consumer's local utility. Recent legislation passed by the Federal Energy Regulatory Commission has paved the way for the de-regulation of Electric Utility Suppliers, with the intent to create a more competitive alternative to purchasing electricity for all consumers.

As consumers shop for lower rates, a high power factor rating (facility efficiency), will be important to qualify for the prime rates. USES® improves power factor more effectively in a resonance free environment, without the inherent risks associated with capacitors. Elimination of power factor penalties on your bill is another improvement to *your* bottom line.

USES® - Your Path to Power Quality, Protection and Savings

POWER QUALITY

- ✓ Improves power factor
- ✓ Reduces total current content including harmonics
- ✓ Reduces line transmitted noise
- ✓ Reduces I²R loss
- ✓ Helps balance phase to phase voltage
- ✓ Absorbs internal distortions and recycles as useful energy

PROTECTION

- ✓ Suppresses spikes, surges & sags
- ✓ Reduces Magnetic Fields
- ✓ Reduces current on neutral

SAVINGS

- ✓ Reduces kilowatt demand
- ✓ Reduces kilowatt hour usage
- ✓ Reduces electric bills

There is no competitive product!

Sole Source Technology

EASILY INSTALLED BY A LICENSED ELECTRICIAN

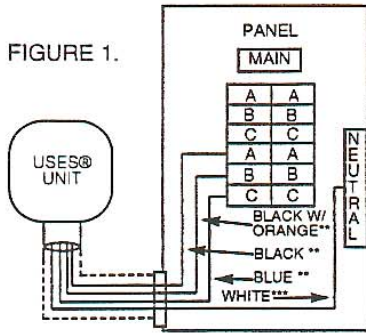
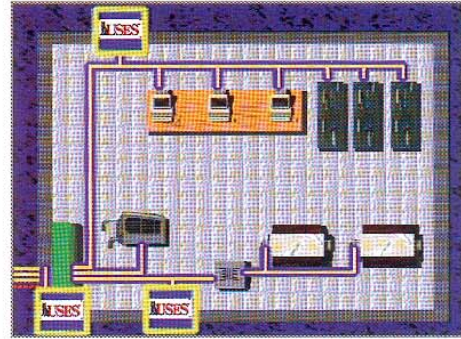


FIGURE 1.

“Y” Configuration installation shown
Parts required: Circuit breakers, 30 amp, 3 pole
 (SWD Rated) (for most 3-phase units)



USES® systems are connected in parallel with electrical panels supplying inductive loads and sensitive equipment. Additional units can be added as your business grows.

GUARANTEED

Continental Power Corporation is so confident in the performance of USES® that we offer a 100% money-back guarantee.

— 3 Year Warranty —

U.S. Patent # 5,105,327

USES® performance is substantiated by a “utility patent” from the U.S. Commerce Dept., which required all performance claims represented by “The USES Power Conditioning System” to be proven during the application process.

TECHNICAL SPECIFICATIONS							
MODEL	CMES-1	CMES-3Y	CMES-3D	CMES-3Y / 480	CMES-3D / 480	CMES-3Y / 600	CMES-3D / 600
Line Voltage	120 / 240 Vac	120 / 208 Vac	208 Vac	277 / 480 Vac	480 Vac	347 / 600 Vac	600 Vac
Nominal Freq.	50Hz / 60Hz						
Power Dissipation per 8x20 μsec.	>650 joules	>1350 joules	750 joules	>2700 joules	>1250 joules	>2850 joules	>2200 joules
Peak Pulse Current	>20,000 A	>30,000 A	>30,000 A	>35,000 A	>35,000 A	>50,000 A	>50,000 A
Max Surge Current per 8x20 μsec.	10,000 A 4 shots	10,000 A 4 shots	10,000 A 4 shots	>20,000 A	>20,000 A	>30,000 A	>30,000 A
Nominal Clamping Voltage	130 / 250 Vrms	130 / 250 Vrms	250 Vrms	300 / 550 Vrms	550 Vrms	385 / 680 Vrms	680 Vrms
Maximum Steady State Voltage	340 V	340 / 650 V	650 V	775 / 1500 V	1500 V	1025 / 1815 V	1815 V
Response Time	<5 nanoseconds						
Surge Rebound	inherent “self healing” property						
Standby Power	>10 watts	>15 watts	>15 watts	>25 watts	>25 watts	>35 watts	>35 watts
Total Capacitance	200 μF	450 μF	450 μF	315 μF	255 μF	315 μF	255 μF
Operating Temp.	-40°C to +70°C						
Unit Temp. Rise	<3°C after 24 hrs under full load conditions						
Audible Noise at 3'	<2 dBA						
Operating Life	>60,000 hrs with over 95% survival						
Line Connections (THHN Single Cond.)	#10	#8	#8	#8	#8	#6	#6
Circuit Breaker Required	20 A, 2 pole	30 A, 3 pole	30 A, 3 pole	30 A, 3 pole	30 A, 3 pole	40 A, 3 pole	40 A, 3 pole
Dimensions (HxWxD)	10'x8'x6'	14'x12'x6'	14'x12'x6'	14'x12'x6'	14'x12'x6'	14'x12'x6'	14'x12'x6'
Estimated Weight	8 lbs	17 lbs	15 lbs	20 lbs	18 lbs	26 lbs	24 lbs
Estimated Savings (Note 1)	1.0 kW 1.0 kWh/hr	1.25 kW 1.25 kWh/hr	1.5 kW 1.5 kWh/hr	2.0 kW 2.0 kWh/hr	3.0 kW 3.0 kWh/hr	3.0 kW 3.0 kWh/hr	4.0 kW 4.0 kWh/hr
Warranty	3 years						

Note 1: kW and kWh savings are provided for inductive. Actual savings depend upon load characteristics.

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◆ Analysis

◆ Equipment

◆ Installation

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