



**USES MFG INC.**  
**CORPORATE BACKGROUND**

- Description:** USES MFG INC. is the manufacturer and marketer of a line of electrical energy conservation and power conditioning products. It is a licensee of USES, Inc., developer of the product's technologies.
- Products:** The company's principal product is the **USES<sup>®</sup> Shunt Efficiency System**, a solid state, power conditioning device which reduces the electrical energy that must be supplied by the utility company to operate inductive electrical loads. It also offers protection from voltage transient surges and spikes and from secondary lightning effects.
- Technology:** **USES<sup>®</sup>** technology consists of parallel, wrap-around magnetic chokes oriented to couple magnetic forces generated across each electrical phase by the current. On the basis of the magnetic fields sensed, a signal is generated that enhances the AC wave form and matches it to the requirements of the inductive load. The peak portion of the current wave on the line side is decreased and electrical system inefficiencies that originate in the supplying transformer are reduced. The complementary winding technique, used with chokes and capacitors, lowers kilowatt-hour (KWH) consumption, energy usage and demand rate, when connected to inductive loads.
- Benefits:** **USES<sup>®</sup>** systems lessen electrical energy waste by: matching voltage and current phases in inductive systems; converting harmonics, spikes and noise to useful energy; reducing I<sup>2</sup>R losses; and balancing loads across all phases. The immediate benefit is verifiable reduction of electric utility bills. Additionally, equipment life is increased while maintenance and down time are reduced. The average return on investment is 6 to 36 months. It has been found that the unique arrangement of chokes provides substantial reductions in power usage, particularly for inductive loads in industrial applications.
- Applications:** **USES<sup>®</sup>** units are installed at electrical panels supplying inductive loads and at the disconnect links for large motors. Units also are installed at any panel for which surge protection is needed.
- Validation:** USES, Inc. was granted U.S. patent 5,105,327 on April 14, 1992; patents are pending in foreign countries. **USES<sup>®</sup>** products are UL and CSA listed and NYC approved. USES MFG INC. is a member of the Alliance to Save Energy and is an EPA Green Lights Ally. **USES<sup>®</sup>** products have been evaluated by the State of Connecticut Advisory Committee on Standards for Electrical Hardware and Supplies and approved for installation in state facilities.
- Distribution:** The **USES<sup>®</sup> Shunt Efficiency System** is sold through a national network of authorized dealers. Seventeen models are available for residential, commercial, industrial, and recreational applications.
- History:** The corporation's lineage is traced to establishment, in 1980, of a Connecticut-based, electronic design and electrical contracting company. The shunt efficiency system has evolved, in part, from a lightning surge protector specifically designed and built for a client. Based upon the success of that design, USES, Inc. was formed in 1990 to further pursue development of electrical energy conservation and power conditioning products. USES MFG INC. was formed in 1993 to concentrate on manufacturing and marketing the **USES<sup>®</sup>** products along with other research and development efforts focused on further applications of the **USES<sup>®</sup>** technology.

©1996 USES MFG INC. All Rights Reserved

*USES MFG INC. PO Box 156, 152 Old Colchester Road, Quaker Hill, Connecticut, USA 06375 • Telephone (860) 443-8737 Fax (860) 439-1515*