

Capacitors

Cooper Power Systems Contributions to the Capacitor Industry

Cooper Power Systems began manufacturing capacitors in 1946. Since that time, the company has introduced many innovations to the design and manufacture of Power Capacitors. The most significant are listed below:

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| <p>1946 Only manufacturer to use patented individual impregnation process.</p> <p>Resulted in more efficient evacuation process which minimized the possibility of dielectric fluid contamination resulting in an extremely reliable, long lasting capacitor unit.</p> | <p>1968 First manufacturer to utilize environmentally controlled clean room facility for capacitor element winding.</p> <p>Resulted in high integrity dielectric components to assure high quality, long lasting capacitor performance.</p> | <p>1986 Introduced extended foil/solderless capacitor design.</p> <p>Resulted in improved tank rupture performance and reduced losses.</p> |
| <p>1949 First manufacturer to introduce capacitor units with stainless steel tanks.</p> <p>Resulted in corrosion and maintenance free capacitor unit.</p> | <p>1971 First manufacturer to announce the successful development of an all film dielectric capacitor.</p> | <p>1987 Introduced the EX-7, High Stacking factor capacitor design.</p> <p>Resulted in further reduction in dielectric losses and improved capacitance stability with respect to temperature variations.</p> |
| <p>1955 First manufacturer to introduce a single row, pole mounted capacitor rack design.</p> <p>Resulted in a complete, compact rack with minimum pole bending moment.</p> | <p>1972 First manufacturer to offer a full range, joule-rated, current limiting fuse utilizing a unique isolation feature.</p> <p>Ideal for substation bank applications where expulsion gases cannot be tolerated.</p> <p>Also perfectly suited for bank applications where fault currents or parallel energy exceeds expulsion fuse limitations.</p> | <p>1988 Introduced the first capacitor design with unified, definite tank rupture curve.</p> <p>Eliminated former tank rupture curve "families" and eliminated probability based curves.</p> <p>Resulted in enhanced safety performance and provided greater bank design flexibility.</p> |
| <p>1959 First manufacturer to introduce a 100 Kvar capacitor with the NEMA standard mounting dimensions as specified for 25 Kvar and 50 Kvar capacitor units.</p> <p>Permitted complete interchangeability with existing equipment.</p> | <p>1975 First manufacturer to announce the successful development of an environmentally safe, non-PCB dielectric fluid and make it commercially available in power capacitors.</p> | <p>1990 Introduced the EX-7L, the first laser cut aluminum capacitor foil design.</p> <p>Resulted in superior dielectric performance providing additional electrical DIV margin.</p> |
| <p>1959 First manufacturer to provide a 230 kv shunt capacitor bank in the United States.</p> | <p>1977 First manufacturer to convert entire power capacitor product line to all film design.</p> | <p>1995 Introduced the EX-D capacitor design.</p> <p>Resulted in increased tank rupture performance up to 15KA.</p> <p>Resulted in superior dielectric performance providing 125% continuous overvoltage withstand capability.</p> |
| <p>1963 First manufacturer to introduce an individual expulsion fuse for use in capacitor banks designed with 15 kv class capacitor units.</p> | <p>1979 First manufacturer to introduce a 300 Kvar single phase capacitor with NEMA standard mounting dimensions.</p> | |
| | <p>1981 First manufacturer to introduce a 400 Kvar single phase capacitor with NEMA standard mounting dimensions.</p> | |
| | <p>1983 First manufacturer to introduce a 500 Kvar single phase capacitor with NEMA standard mounting dimensions.</p> | |

MANUFACTURING FACILITIES

Cooper Power Systems power capacitors have been manufactured in Greenwood, South Carolina since 1973. This modern, 150,000 square foot facility houses all capacitor activity including marketing, engineering, and production disciplines.

The plant is an ISO-9001 certified facility.

For more information, contact your Cooper Power Systems representative or write to:

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