

# SE700 POWER FACTOR CORRECTION SYSTEM



780-968-8859 www.selectelectricalent.com

## PROUDLY MANUFACTURED IN



#### **What is Power Factor?**

The power factor of an AC power system is defined as the ratio of the real power absorbed by the load to the apparent power flowing in the circuit. A power factor magnitude of less than one indicates the voltage and current are not in phase, reducing the average product of the two.

Utility company's are billing and penalizing the consumers with inefficient systems according to the apparent power being used, if the power factor is below a pre-determined value.





### Why Should You Improve Your Power Factor?

- Improves plant efficiency
- Reduced kVA charges
- Additional loads can be added to the system
- Improved network voltage
- Reduced overloading of cables, transformers, switchgear, etc.
- Improved starting torque of motors
- Reduced fuel requirements to generate power due to line losses
- Compensates reactive power requirements in cogeneration installations.

780-968-8859 www.selectelectricalent.com

#### **How to Correct a Poor Power Factor:**

We have seen that sources of reactive power (inductive loads) decrease power factor. So, examples of that would be transformers, induction motors, induction generators, high intensity discharge (HID) lighting.

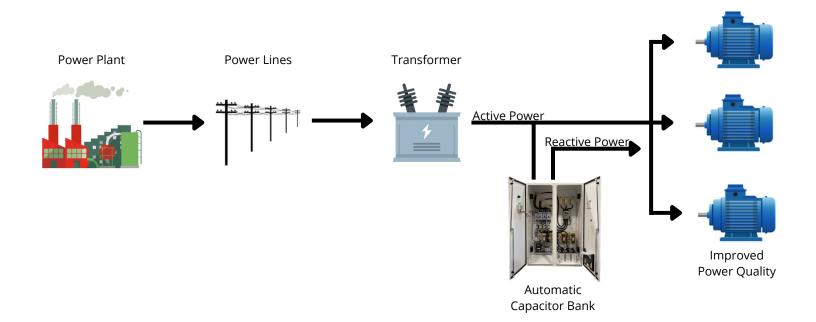
There are several different ways to correct this problem:

- Capacitor or Capacitor Bank
- Automatic Capacitor Bank
- Minimizing operation of idling or lightly loaded motors
- Replace standard motors as they burn out with energy-efficient motors
- Installing a VFD to correct the power factor



#### SEEL SE700 Power Factor Correction Specifications

- Power Supply: 230/460/600 VAC
- Input: 3 Phase
- Ambient Temp: -40 DEG C To +50 DEG C
- Enclosure: NEMA 4
- CSA/ETL Certification (C & US)
- Integrated Automatic Power Factor Controller



780-968-8859 www.selectelectricalent.com