**Abstract**

Analog to Digital conversion of electric power is widely employed in many industrial applications. A majority of the power electronic applications in industrial applications make use of controlled DC power. The trend is to use the inexpensive rectifiers with diodes to convert the input AC into DC in a controlled manner, using rectifiers with diodes. But they have the problems of poor power quality in terms of injected current harmonics. These rectifiers draw highly distorted current from the utility. Resultant voltage distortions and poor power factor at input AC mains and slowly varying rippled DC output at load end. There are several ways to overcome from these problems. Our goal is to develop them to a matured level with improved power quality.