

Problem ID	SGH129
Problem Statement	Cost Effective harmonic filters.
Name of Industry / Organisation	CADILA Pharmaceuticals Ltd.
Type Of Industry / Organisation	Corporate
Challenge Description with Context	<p>Many UPS, Variable frequency Drives, soft starters required to install in many applications in continuous plant industries like Pharmaceuticals, chemical, agro, food, textile etc.</p> <p>They are the sources of harmonic generation. Because of harmonics, power quality disturbances, voltage deflection, neutral loading, requirement of higher capacity switchgears, life of switchgear decreases.</p> <p>Also, for neutral loading and unbalancing in the power system occurs and life of distribution devices like transformer will also decreases.</p> <p>Presently in market many devices like active filters, passive filters are available. But it leads to plant modifications and also its not cost effective solution. It also leads to shut down because of retrofication.</p> <p>Hence, task is to find out cost effective harmonic filters.</p>
What Exact Problem is being Solved?	<p>Use of UPS, Variable frequency Drives, soft starters etc. is going to increase day by day. Hence harmonic generation cannot be eliminated.</p> <p>Problem solution is find out cost effective harmonic filters, which do not demand system modifications.</p>
Users	Pharmaceuticals, chemical, agro, food, textile and other continuous plant industries.
Expected Outcomes	<p>Cost effective harmonic filters if possible to install without system modification then it will benefit power system.</p> <p>Reduction in Neutral current, increase in power quality, increase in life of switchgears, cost saving in switchgear cost.</p>
Potential Impact	<p>Reduction in Neutral current, increase in power quality, increase in life of switchgears, cost saving in switchgear cost.</p> <p>Hence, efficient operation of all continuous plant industries.</p>