Major Energy Conservation Projects Implemented During 2007-08

1. Running of GA110 LP compressor as HP during 3.00 A.M to 7.30 A.M

Before: Three compressors running during 3.00 A.M to 7.30 A.M. Two compressors running in unload condition.

After: Interlink the HP and LP line by regulator and one compressor switched off.

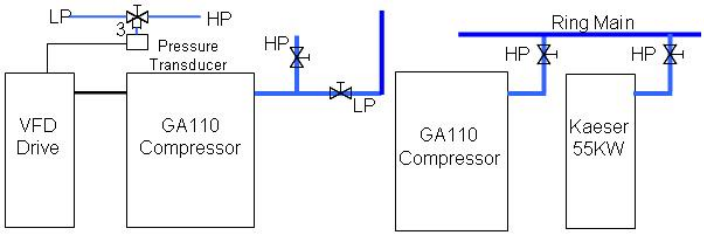
Project implemented : June 2007

Power saving : 1, 56,600 units / Annum

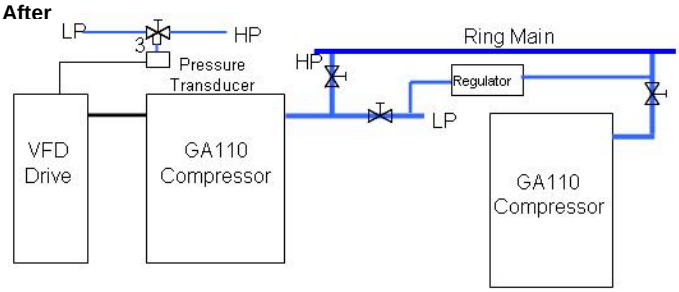
Savings in rupees : 7.06 L / Annum

Total Investment : 0.03L

Before:



After



2. Introduce demand side management

Before: All ACB are continuously on if power demand reach to maximum demanded value.

After: Predictive demand value read from remote PC and sent to PLC then it is control the ACB by tripping the Non critical loads.

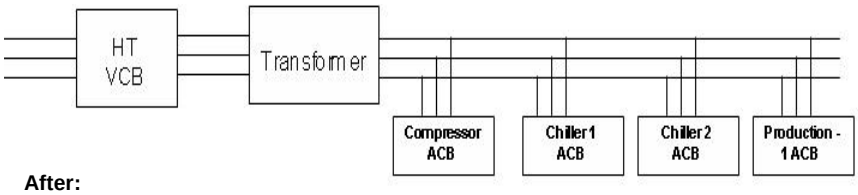
Project Implemented : Jun 2007

Benefit : Controlled demand with in 90% for availing the electricity board rebate

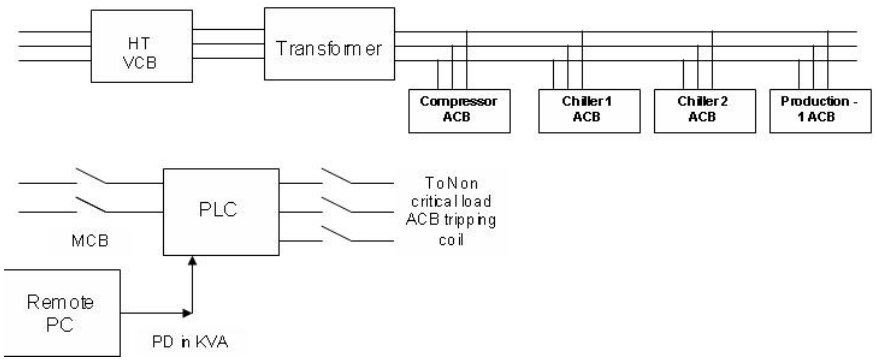
Savings in rupees : 8.28L / Annum

Total Investment : 0.50L

Before:



After:



3. Installation of VFD for Scrubber

Before: Air scrubbers are commonly used in process-air applications to eliminate potentially harmful dust and pollutants. A liquid, in general water added with active chemicals adapted to the process, is sprayed in to the air flow. Aerosol and gaseous pollutants in the air stream are removed by either absorption or chemical reactions with the water solution. Scrubber motor used in anodizing plant to circulate air and it runs at a speed of 1500RPM, and it running continuously.

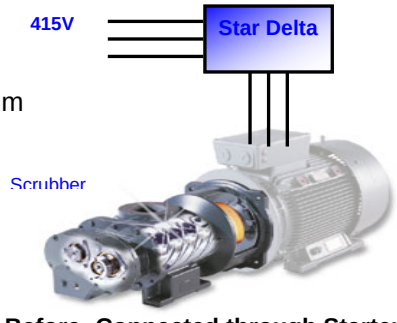
After: Variable frequency drive provided for scrubber motor and speed of the motor is controlled with in the range of 35Hz to 50Hz. Time varying control is provided to control the VFD which in turn controls the speed of scrubber motor based on time, Average power consumed after installing VFD is reduced from 360 Units to 270 units

Project Implemented: May 2007

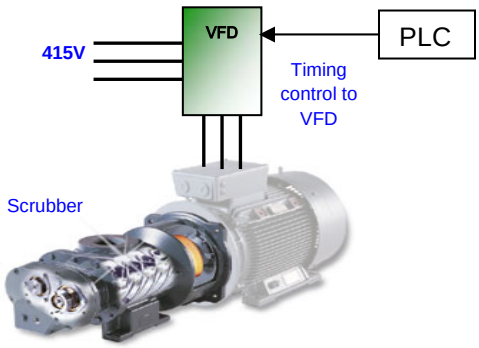
Power saving : 28,080 Units / Annum

Savings in rupees : 1.26L / Annum

Total investment : 0.70L



Before: Connected through Starter



After: Connected through Drive