

# The Harmony of Power



## BACKGROUND:

PHA (Pyeong Hwa Automotive) India is a manufacturer of low cost and high quality parts for automotive door and engine parts. It supplies products to leading domestic and MNC automotive OEM's in India. It uses large number of automated press, welding machines to produce the automotive parts at its manufacturing facility located in Sriperumbudur near Chennai.

## PROBLEM:

PHA India received a notice from TNEB to control the harmonics being generated within the limits set. Large part of the harmonics was generated by the welding process at its facility.



## SECTOR:

Industrial / Manufacturing

## PRODUCT:

Active Harmonic Filters

## SOLUTION:

After a full inspection and study the team recommended installation of a 400Amp AHF to control harmonics. In the pre installation phase it was found that the current variation was very high between 30 to 100%. This was due to all machines being connected with 2 phase. Due to the load current variation and the unbalance current the AHF was not able to keep the harmonics within limit. Based on this feedback, the R&D team of Consul Neowatt developed ad new firmware for welding applications.

## RESULT:

Installation of the 400Amp AHF with new firmware was able to bring the total harmonics within the limit set by TNEB.

