



ESEC[®]
EAST SEA ENERGY ENVIRONMENT



Project: Active Harmonic Filter Solution
Customer: SURINT OMYA FACTORY

TURN IT BALANCE

Customer Profile



Surint Omya is a leading producer of industrial minerals, mainly fillers and pigments derived from calcium carbonate and dolomite. Jointed in 1987 as a joint Venture company with Omya AG Switzerland, Surint Omya Thailand now has located at Lopburi and Surint Omya Vietnam which has located at Go Dau industrial Zone, Dongnai Province, South Vietnam.

The Competition



The customer initially chooses the passive filtering solution that is a non-optimal and high-performance solution, the competition is eliminated due to the strong technical team & ESEC's capability starting from performing PQ Audit services until the propose the AHF PCS+ offer with the reliability of our products....

Customer Challenge

PQ Meter + PME Software



Accusine PCS+



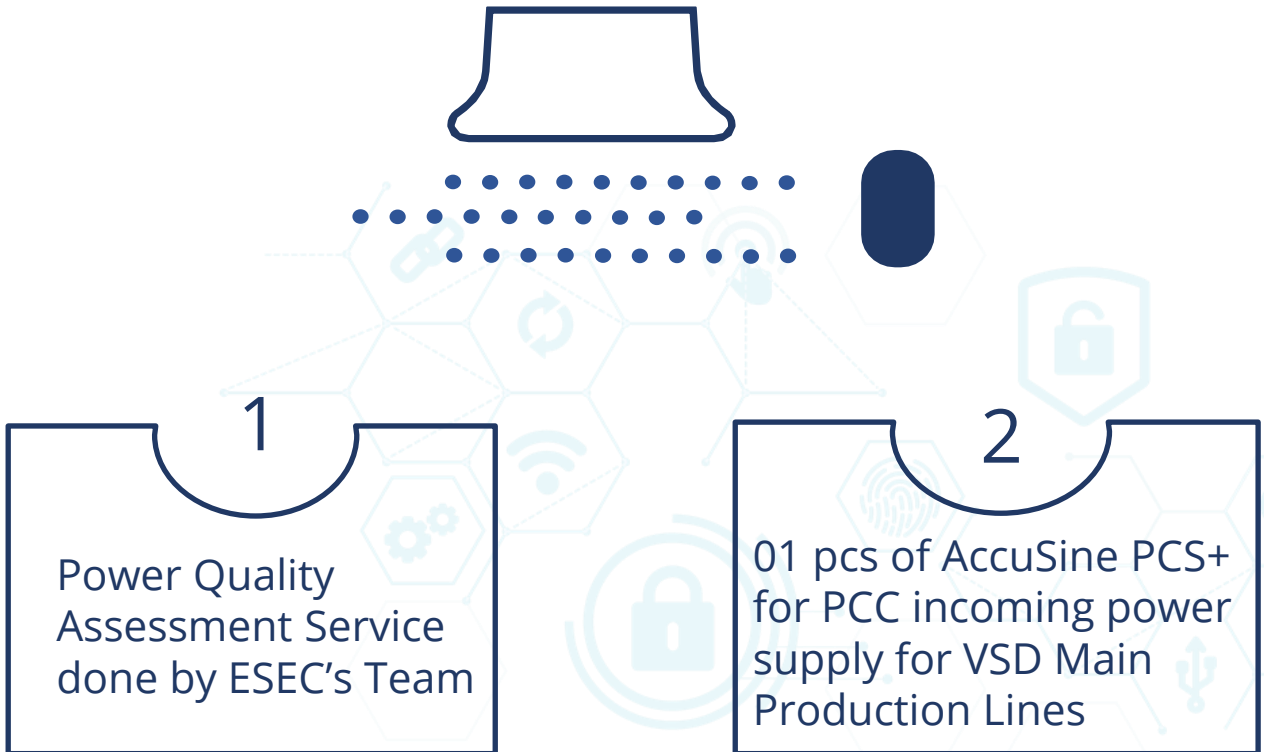
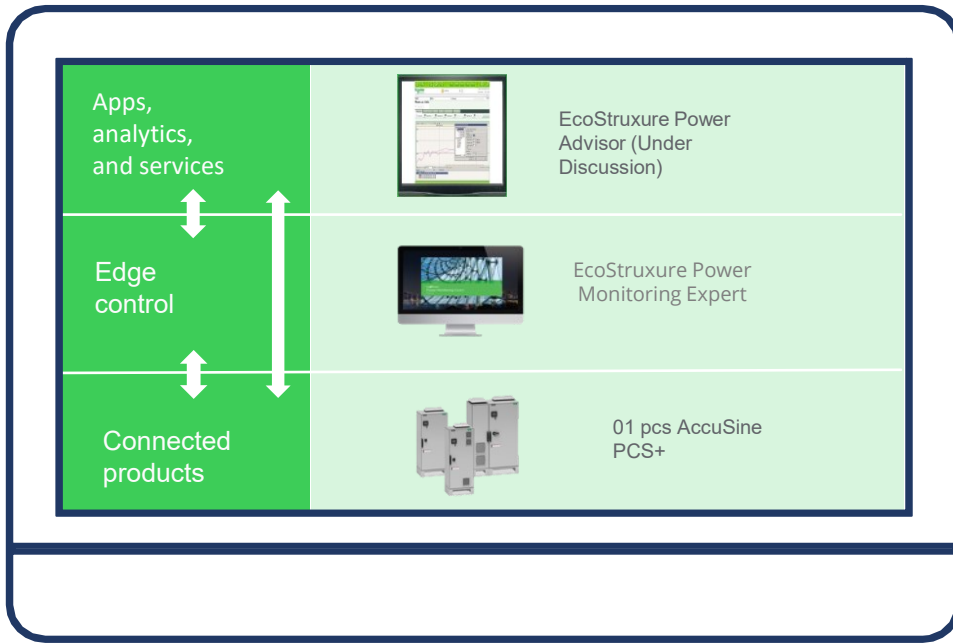
EcoXpert Partner



Harmonic current generated by motion control and VSD system is high that led to high harmonic current and voltage distortion, that results in:

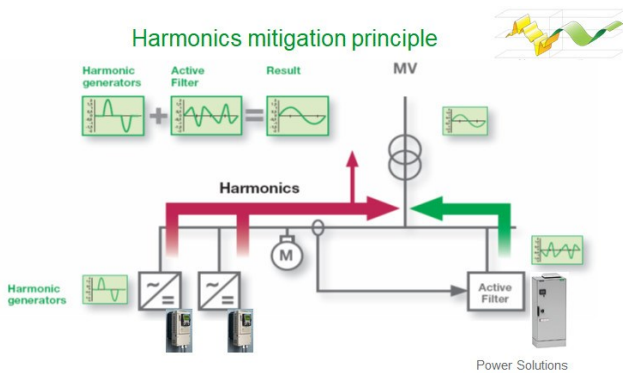
- Neutral overload due to 3rd harmonic currents
- Overheating cable, VSD Main Production Lines fails
- Reduce harmonic level into safe region as suggested by Regular 39,30 – Vietnam MOIT & IEEE 519 standard. < 5% TDD

The Solution



Customer benefits

Power quality (Harmonic) of Surint Omya will comply with IEEE 519 and TCVN (Regular 39 & 30 – Vietnam MOIT) standard

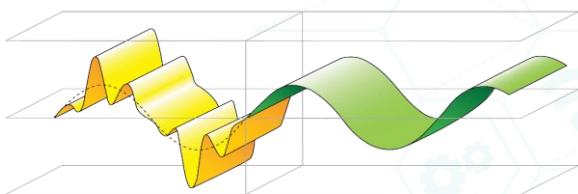


- **Improve power reliability and productivity (power management)**

- ✓ Reduce peak currents which frees system capacity
- ✓ Limit current distortion
- ✓ Cancel the effects of harmonics

- **Avoid equipment damage or shortened life (asset management)**

- ✓ Reduced harmonics diminishes the production of excessive heat
- ✓ Prevent logic faults which can result in downtime
- ✓ Improve equipment service life time



- **Improve financial performance (cost management)**

- ✓ Reduce power factor penalties
- ✓ One of the factors that contributes to the power consumption saving program of factory

Parameter	Before	After
THDv	11.7%	5.3%
THDi	22.4%	5%
DPF		1.0