



ESEC[®]
EAST SEA ENERGY ENVIRONMENT



Project: Active Harmonic Filter
Customer: CAFÉ OUTSPAN FACTORY VIETNAM

TURN IT BALANCE

Customer Profile

Café Outspan Vietnam Co., Ltd. is a member of Olam International Group (Singapore) - an enterprise specializing in the supply of agricultural and food products, now available in 60 countries around the world with 20 types of produce.

Currently, the company has more than 4,000 employees working in 10 large agricultural processing factories located in Central and Southern Vietnam.

The Competition



Our main competition is ABB-HITACHI & Danfoss, which has an installed base of variable speed drives in the customer's facilities, but 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....

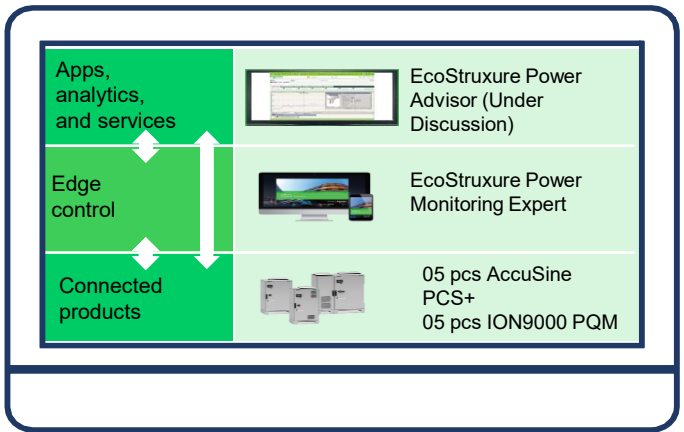
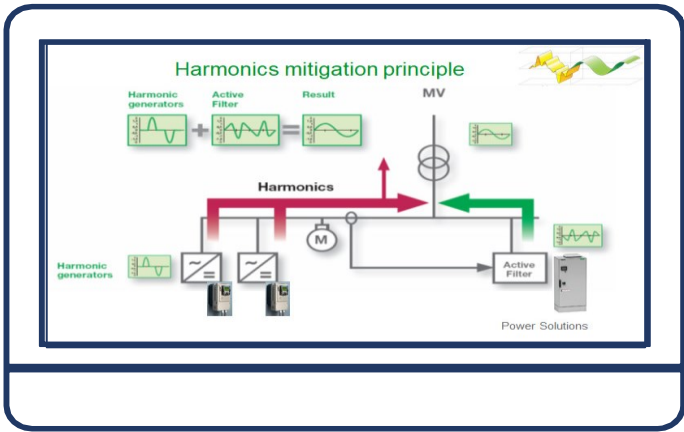
Customer Challenge

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
- ✓ MCCB trip, overheating cable, PLC fails
- ✓ Reduce harmonic level into safe region as suggested by Regular 39,30 – Vietnam MOIT & IEEE 519 standard. < 5% TDD.



The Solution



1

Power Quality Assessment Service done by ESEC's Team

2

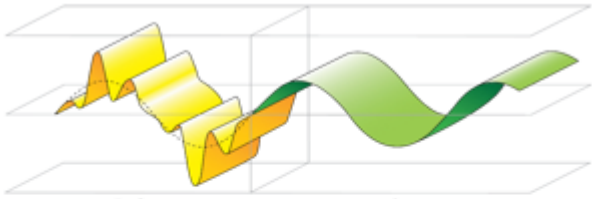
05 pcs of AccuSine PCS+ for MSB 3,4,5,6

3

Power Monitoring Expert with 05 ION9000



Customer benefits



Parameter	Before	After
THDv	11.7%	7.6%
THDi	28.4%	5%
DPF		1.0



Power quality (Harmonic) of Café Outspan 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