



Success Story | Power Quality

Wisma Indocement, Jakarta

Optimal power quality for business group

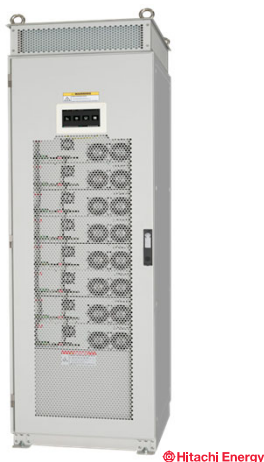
Hitachi Energy's active filters ensure the dependable operation of premium buildings, exemplifying excellence in engineering and efficiency.

Customer profile and challenge

Established in 1981, Wisma Indocement building is one of the oldest skyscraper in Jakarta. Positioned as the prestigious headquarters of a leading conglomerate, Wisma Indocement stands as an emblem of corporate excellence in Jakarta. Located amidst the dynamic urban landscape, the building accommodates essential functions including administrative offices, executive suites, and state-of-the-art conference facilities, reflecting commitment to innovation and growth.

This facility is equipped with many electrical equipment, including motors and variable frequency drives (VFD). These loads can be the sources of multiple power quality issues like harmonic pollution. Such issues result into poor power quality, overheating transformers, excess stress on other equipment and power network leading to potential failure, and penalties from power utility.

Active harmonic filter
PQactiF in cabinet
configuration



Solution

Oscorp Elektrik Indonesia conducted a comprehensive analysis and proposed the implementation of the modular active harmonic filter, PQactiF from Hitachi energy, on the building's low-voltage network. The network will benefit from canceling harmonics and other forms of electrical noise, ensuring a cleaner, more stable, and safer power supply.

Product such as PQactiF actively support industries in maintaining output quality and efficiency while also aiding in the optimization of renewable energy utilization. "We are pleased to collaborate with Hitachi Energy on this innovative solution, which will contribute to a more sustainable network and enhance our building's overall efficiency," remarked Anton, Chief Engineer at Wisma Indocement. Following installation, Hitachi Energy's active filter has showcased its efficacy and user-friendly features, attributed to its modular design and intuitive interface.

Technical Data

Parameter	Value
Year of Installation	2024
Type of product	PQActiF active filter
Number of units	1 cabinet 7 modules of 40A each
Output capacity	280 A
Voltage	400 VAC
Frequency	50 Hz
Function	Harmonic priority & L-N balancing



Active filter for Wisma Indocement: Improving power quality for business conglomerate



PQactiF



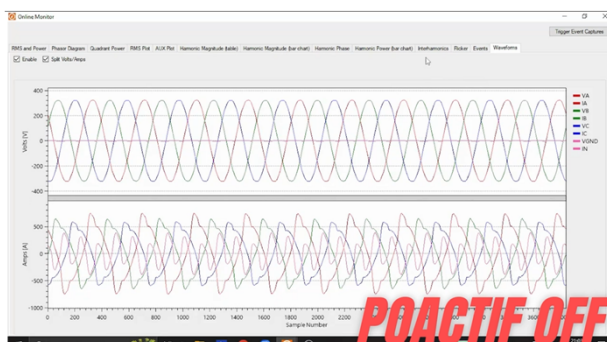
Efficient operations



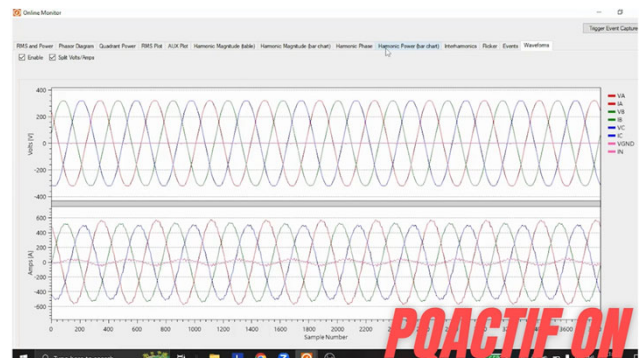
Output quality



Eco-efficiency



Line current waveform without PQactiF



Line current waveform with PQactiF

IA	IB	IC	IN
432.306	385.033	365.275	219.357
1.672	1.625	1.535	1.776
421.495	377.200	357.505	0.000
-13.853°	-134.053°	102.371°	0.000°
432.306	385.033	365.275	219.357
0.242	-0.144	0.161	0.361

IA	IB	IC	IN
407.002	382.645	365.861	27.589
1.473	1.447	1.448	2.315
406.972	382.342	365.766	0.000
-12.382°	-134.441°	105.458°	0.000°
407.002	382.645	365.861	27.589
-0.308	0.195	0.165	0.570