

ecoFIT and ELGEF Plus

Corrosion-free cooling applications for shopping malls in the Philippines

Condenser waterline and chilled waterline for WalterMart

PE installation at WalterMart
Sta. Rosa, Condenser Water Line

ecoFIT and ELGEF Plus as a non-corrosive alternative for cooling applications in large shopping mall chain

WalterMart is a chain of 44 community shopping malls located in the Philippines. The chain includes WalterMart Supermarket, WalterMart Cinemas, Abenson Appliances, Homeplus Furniture, Electroworld, and SB Furnitures and continues to expand. The negative effects of a corroded metal system and the urgent need for a better solution led them to GF Piping Systems. The first project started in 2019. Due to the successful collaboration and positive results achieved, WalterMart has worked with GF Piping Systems on 13 more projects over the last 3 years and still counting.

Project background

Incrustation formation has been a challenge to long term business operations. The usage of black iron metal pipes (BI) for condenser water lines resulted in inefficient flow, high energy consumption and the high cost of maintenance. Due to all these issues that arose from the corroded metal pipe, WalterMart was looking for an alternative piping system and decided to replace the metal system for a variety of applications with GF Piping Systems' solutions. Since the community malls were in full operation, most of the installations had to be completed after store hours from 9:00pm onwards.

Chosen technical solution

The first projects in 2019/20 were focused on upgrading the air conditioning systems in the existing shopping mall, WalterMart Sta. Rosa, Balibago. The metal piping systems for condenser water were replaced with ecoFIT and ELGEF Plus PE pipes and fittings. Additionally, the numerous Ball Valves 546 and Butterfly Valves 578 were installed and MSA 4.0 electrofusion machine was used to joint the system. Due to the successful replacement and to avoid all potential issues related to the corrosion of metal pipes in the future, WalterMart also applied GF Piping Systems solutions for another existing shopping mall; WalterMart Makati in 2021 and 2022. This time besides the condenser waterline, the chilled waterline were replaced by PE pipes and fittings. AQUASYSTEM PP-R pipes and fittings were used also for the Air Handling Unit pipeline. For newly built WalterMart community malls, AQUASYSTEM PP-R and PE piping systems were installed for potable waterlines. In order to achieve the best results for the cooling applications, ecoFIT, ELGEF Plus, Ball Valves 546 and Butterfly Valves 578 will continue to be the preferred material for another chilled water upgrade - WalterMart Guiginto branch.

Achieved improvements

Corrosion is an issue of the past. With the new plastic piping systems, WalterMart can rest assured of non-corrosive and maintenance-free pipelines, leading to reduced energy consumption, reduced maintenance costs and stable flow.

They are specific on using quality materials and installation, lightweight piping materials, and our electrofusion welding makes installation fast and easy. WalterMart is also very satisfied with our support in aftersales (welding trainings, installation concerns) and they have a growing partnership with GF.



Bare PE pipes for condenser water application, WalterMart Makati branch



Post-insulated PE pipes for chilled water line at WalterMart Makati branch

Customer Benefits

- Reduced energy consumption
- Reduced maintenance costs
- Stable flow
- Ease of installation
- After sales support
- Peace of mind