

Defluoridisation (DF) Water Treatment System for a Global Nutritionals Plant in Singapore



Our client manufactures a wide range of infant formulas for babies and children in four different age group – from zero to seven years old. The company is part of a global biopharmaceutical giant, which engages in the discovery, development, manufacture, and marketing of prescription medicines for humans and animals worldwide.

Their diversified global health care portfolio includes human and animal biologic and small molecule medicines and vaccines, as well as nutritional products and many of the world's best-known consumer products.



DF Water Treatment System

The company increased its presence in Asia-Pacific by investing more than US\$90 million to expand its nutritional manufacturing facility in Singapore. Located in Tuas, the state-of-the-art facility utilizes the strictest of operational and quality standards in producing key nutritional products for infants and toddlers, including formula and milk products such as Progress and Promise. EES Technology Pte Ltd a subsidiary of Enersave Worldwide Sdn Bhd was awarded the contract to supply and commission the DF Water system in Singapore on a turnkey and validated basis by M+W Zander who were the General Contractor for the design and construction of a large nutritional facility. M+W Group (formerly known as M+W Zander) is a recognized global project partner for technology-based clients in the segments electronics, photovoltaics, life sciences, chemicals, science and research, energy, automotive, IT and telecoms, aerospace and defense.

The water purification system includes Multimedia Filters system (290m³/hr) 2 x 25m³/hr Softeners and an 18m³/hr Reverse Osmosis (RO) System, associated plant controls and equipment for fully automatic operation. All plant piping material is in 304L stainless steel, along with stainless steel RO pressure vessels. This system produces a water quality of < 16µS in conductivity and removes 95% of the Fluoride present in the City Water Supply. This plant has been in successful operation since March 2009.