



## CASE STUDY

### INDUSTRY: FOOD & BEVERAGE



**CUSTOMER:** Unilever Thai Holdings Limited

**LOCATION:** Bangkok, Thailand



**BACKGROUND:** Unilever was interested in replacing their outdated steam and heat exchanger system to optimize the production process in their ice cream plant. Armstrong International's local representative, Alpha Group, recommended installing a complete hot water system to replace the existing system.

**SCOPE OF WORK:** Armstrong supplied an Armstrong Flo-Direct® Complete Thermal Exchange (CTE) water heating package to produce hot water at 185°F (85°C) with a VFD unit to pump the heated water into process. An Armstrong MegaMix E50W control valve mixed hot and cold water, and supplies water at 140°F (60°C) for washdown process.

**BENEFITS:** By using a direct-gas fired water heater, Unilever has calculated fuel savings of more than 30% when compared with the old system. Armstrong's Flo-Direct® has also helped Unilever to reduced their carbon footprint by decreasing CO<sub>2</sub> emissions by 612 tons per year. In addition, Unilever enjoyed a return on investment within 14 months of installation.

