

Heat recovery from warm wastewater

Warm wastewater either discharged or treated in effluent plants, is a by-product of many processes including beverage, food processing, dairies, abattoirs, chemical processing, and pulp and paper industries. Hot wastewater is found in abundance at textile dye houses, laundries and tanneries as a part of their processes. Most of the time, wastewater is sent out to the effluent treatment plant, without recovering the heat due to perhaps low temperatures or particles and fibres it may contain.

Finding the right heat transfer equipment that can handle fibres at the same time provide close approach temperatures for heat recovery is not easy. Fibres require minimum contact points to avoid blockage, and at the same time, heat recovery needs efficient heat transfer. Here the Alfa Laval WideGap plate heat exchangers play a perfect role.

The heat stored in wastewater generated by burning fossil fuels such as natural gas, LPG, fuel oil, or coal. Sometimes, steam may have been used to indirectly heat the water, used in various processes and then discharged from the plant. Throwing away this heat is a loss in plant profitability, time and can have severe environmental effects.

