Life-wide Learning Sharing (6A)

LAU CHI HIM

LAU SUET YING



The picture shows a heat exchanger. Maybe you have seen this name in many famous industrial processes, but how does it actually work?

In fact, it is a device allows heat energy to transfer from one substance to another by applying the law of conservation of energy. For example, in a deccicant dryer, the hydrated deccicant needs heat to decompose it back to its anhydrous state to continue functioning. At the same time, air conditioners produces heat at its back and emits to the surroundings. With heat exchanger, the heat seemed to be useless will be collected for other uses.

Using heat exchanger greatly saves energy for heating and increases energy efficiency, which is a green chemistry practice.

In CLP, it shows a machine which helps cleaning the tubes connected to air-conditioner. The principle of operation is about inputting a rubber ball into one end of the tube, by using high air pressure, the ball runs through all tubes and help cleaning the tubes. This can increase the energy efficiency of the air-conditioner. From this, we can see that it has applied green chemistry.

This is the E-city in the Center. It has a water tank to transmit the water more efficiently, which match the idea of energy efficiency of green chemistry. When the energy of transmitting water SO HOI WING is saved through the system, the efficiency of using energy is increased. Therefore it shows the idea of green chemistry. The Green City has adopted a newly designed water-pumping system (the six black wells in the picture) which can pump water out using less YEUNG WING LUN energy. This implies that it has high energy efficiency and the process is green.