Multi-Port Plate Exchanger Model - Acrylic

Model: 115-MPPE

A common characteristic of most mechanical and chemical systems is the need to transfer heat from one fluid (liquid or gas) to another, and most systems use heat exchangers to accomplish this task. In a heat exchanger, the two fluids do not make direct contact. Instead, heat passes from the hotter fluid to the metal isolating the fluids and then to the cooler fluid.

Common applications of heat exchangers include heating, ventilation, and air conditioning (HVAC) systems; preheaters or coolers in fluid systems; radiators on internal combustion engines; and boilers, evaporators, and condensers used with fluids like oils, wastewater, hydrocarbons, biogases, etc. in industries such as oil and gas refining and power generation.

Although heat exchangers come in a wide variety of shapes, sizes, and designs, there are two basic types of heat exchangers: shell and tube heat exchangers and plate-type heat exchangers. Rather than tubes, plate-type heat exchangers use plates to separate hot and cold fluids. Baffles direct the alternating flow of fluids between each of the plates.

Compared to shell and tube heat exchangers, plate-type heat exchangers can transfer much more heat, because each of their plates has a large surface area that provides a larger heat transfer area. As a result, plate-type heat exchangers tend to be smaller than shell and tube heat exchangers with a similar heat transfer capacity.

However, plate-type heat exchangers aren’t as widely used because it’s difficult to effectively seal the large gaskets between the plates. That’s why they tend to be used in low-pressure applications like oil coolers on engines.

Bayport Technical's Multi-Port Plate Exchanger Model - Acrylic (115-MPPE) showcases the operational features of a multi-port plate-type heat exchanger. This sturdy, transparent acrylic training model allows learner to dismantle the training aid, examine the component parts, and understand how the unit is assembled, including gasket positioning. Instructors can then let learners reassemble the unit for training purposes.

SPECIFICATIONS

- Allows for dismantling and reassembling

PRODUCT DIMENSIONS

- For overall dimensions, please contact Bayport Technical.

Address

Bayport Technical
905 S. 14th Street
La Porte, TX 77571

Contacts

email: bayportcontact@amatrol.com
phone: (281) 471 1229