

Plate Heat Exchanger

Heat Exchangers in the Process Industry

Heat Exchangers have been used since the very early days of the process industry for a range of heating and cooling duties associated with heat recovery, with the aim of maximizing process efficiency. From Shell and Tube units to Plate heat exchangers for ever closer approach temperatures capabilities, space and economy savings.

Plate heat exchangers consist of a series of corrugated plates with a peripheral gasket that are held within a steel frame. All liquid contact surfaces are manufactured in stainless steel that eliminates corrosion due to aggressive media. If stainless steel is not suitable other higher grade materials are available, such as Titanium or Hastalloy. Gasket selection is also considered for each application, such as Nitrile, RCB, EPDM, Viton

AHTT Plate Heat Exchangers are Work Cover Approved and manufactured in an ISO 9001 quality approved manufacturing facility, to meet all international heat exchange standards.



Performance:

Backed by a large engineering based manufacturer with the newest plate presses in the industry. Extensive R&D is continuing to ensure that an ever larger range of units is made available to meet customer requirements exactly. Thermal Calculations are undertaken using advanced industry standard parameters. Extensive contacts and reference sites world wide 30 years, in the most exacting industries is testament to the long term quality and performance of these world class Plate Heat Exchanges .

ISO9001 Quality Certified Manufacture



Features Of The PHE

High Performance :

The total heat transfer co-efficient of the PHE is 2,000-6,000 Kcal/m2/hrC. The value is 3 to 10 times higher than the traditional shell and tube heat exchanger.

High Economic Tendency:

The PHE can maximise energy transfer efficiently from the unique combination of high turbulence and thin plate technology for any given unit size.

Maintenance costs are also reduced due to it's compact size.

Variety of Options:

The PHE has been developed to allow many types of plates and gaskets for a large number of applications.

Changing the number of plates or configuration of the plate pack allows for a change in duty requirements in the shortest possible time.

Maintenance is also greatly simplified, should Re-gasketing or the cleaning of the plate surfaces be required.

Excellent versatility :

The PHE can carry out many kinds of processes from ice making, cooling, heating and condensing or evaporation, with one set of suitable plates



Some Typical Applications:

Chemical Industry

Cooling of Soda, Pigments, Fertilisers, Refined Oils, Oil and Fat, Medicines, Acids, Kerosene, Soft Water, Brine, Hexane, Polymerisation Process and Heating of Glycerine and Condensing of Ethanol

Steel Industry

Cooling of Mould, Furnace, Coking Plant, Casting Facilities, Ammonia Water, Electrolysis Gilt, Compressor, Oil Press Oil, and Recovering of Waste Heats.

Mechanical Industry

Cooling of Mechanical Apparatus, Emulsion, Press Oil, Grinding Liquid, Furnace, Engines, and Waste Heat Recovery.

Textile Industry

Cooling of Cleaning Water for Spinning and Weaving, NaOH Liquid, and Dyeing Water. Recovering of Waste Heats.

Automotive Industry

Spray Booth Cooling of Heat Treatment Liquids, Cutting Liquids, Coating, and Spray Booth Paint and Heating of Pre-treatment Liquid.

Various Other Applications

Heat Transfer and Waste Heat Recovery of Electric, Electronic, Semiconductor, Factories, Power Stations, Sea water, Heating or cooling of buildings (HVAC).



