

Solar System with Plate Heat Exchanger

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Abstract : Solar heating is the most environmentally friendly way to heat water. Braze Plate Heat Exchangers (BPHEs) are a key component in many solar heating applications for harvesting solar energy into accumulator tanks, producing hot tap water, and heating pools. The combination of high capacity in a compact format, efficient heat transfer, and fast response makes the BPHE the ideal heat exchanger for solar thermal systems. Solar heating is common as a standalone heat source, and as an add-on heat source for boilers, heat pumps, or district heating systems. An accumulator provides the possibility to store heat, which enables combination of different heat sources to a larger extent. In turn this works as protection to reduced access to energy or increased energy prices. For example heat from solar panels is preferably stored during the day for use at night.

Keywords : district heating and cooling, thermal storage, braze plate heat exchanger, solar domestic hot water and combisystems

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