

A plate heat exchange apparatus has a cylindrical body with at least one end cover, heat exchange plates placed in the body in parallel to each other, mostly in round shape, those are rigidly connected in contour and collector openings to pack with formation of two systems of channels by which the first heat carrier falls to inter-plate slot channels through collector openings and the second one – to neighboring inter-plate slot channels connected by it to the inner space of the body of apparatus, branch pipes installed on the end cover of the body for supply and discharge of first heat carrier through collector openings of the heat exchange plates, and on the body itself there are branch pipes for supply and discharge of the second heat carrier from the inner space of the apparatus. Between the collector openings of the heat exchange plates dividing partitions are installed, and the collector openings are displaced along those dividing partitions from the center of the plates to periphery of those, and dividing partitions form in peripheral section of the plates, opposite to direction of displacement of collector openings adjoining those, bypass channels.