

According to the method of arranging packing elements in a heat and mass transfer apparatus, the packing elements with longitudinal channels are used and arranged in a vertical position in horizontal layers, with adjacent packing elements in each horizontal layers in contact with one another. After arranging the packing elements within the horizontal layer of the heat and mass transfer apparatus' contact section, longitudinal inserts are placed between them. The packing elements within the horizontal layer of the heat and mass transfer apparatus' contact section are arranged in line. Each longitudinal insert, having a cross-section in a shape of a regular star with eight plate arms, is placed between four adjacent packing elements, each of which has an outer shell in the form of four identical open shells inscribed in a straight circular cylinder, evenly spaced in the circumferential direction parallel to one another and connected to one another by their edges to form a straight circular annular half-cylinder. Inside the outer shell, the intermediate and inner shells, which have a similar shape, are placed coaxially. The abovementioned outer, intermediate, and inner shells are rotated 45° relative to one another. The outer and inner shells of each packing element are connected to one another by radial longitudinal partitions. The longitudinal ribs of open shells of the inner shell are connected to one another by two mutually perpendicular longitudinal partitions.