## a 2002 0226

The invention relates to the hydraulic engineering industry, in particular to the constructions of multistage centrifugal pumps, including the submersible ones used for pumping of liquids containing solid organic inclusions.

The multistage centrifugal pump contains a body, a shaft, close-type impellers with discharge openings placed onto the shaft with the possibility of axial displacement. Onto the pump's shaft, behind each impeller there is mounted an insert with a guide channel fixed thereon, composed of disks with different diameter and guide plates. Onto the disk with a greater diameter there is installed a thrust ring, forming with the guard disk of the impeller a throttling slot, and the drive disk of the impeller and the insert face form the second throttling slot. The inlet and discharge chambers communicate via both throttling slots. Onto the upper face of the insert and onto the thrust ring of the greater disk of the guide channel there are made shaped prominences for the provision of the hydrodynamic pressure. Into each stage of the pump there is installed a hollow cylindrical bush, reinforced with metal rods.

Claims: 4 Fig.: 1