

In November, the first Soviet-made hydrodynamic headbox was installed and placed in operation at the Kondopoga Pulp-and-Paper Combine. It is, perhaps, the main component of any papermaking unit and on its smooth operation depends improvement in the quality of the web of newsprint.

The Kondopogans are more than satisfied with the new apparatus. Its use has already made it possible to reduce the concentration of the pulp. The newsprint has become more uniform in thickness and more tear-resistant, as well as being more pleasing in appearance.

The device was manufactured by Petrozavodsk machine-builders over a two-year period, which is the amount of time foreign firms would have needed. It was difficult to stay within the allotted time span: the necessary expertise was lacking, for many of the parts had to be machined to a tenth grade of fit. The inner surface of the box was polished to mirror-brightness. This was done to ensure an even flow of the mixture with no piling up of the pulp.

The main difference between the hydrodynamic device and the boxes that have existed until now is the absence of rotating parts. Since there is nothing to break and nothing to adjust in the new unit, this means that all the dimensions, clearances and correlations are established once and for all. The device requires no special maintenance, except that on occasion, special access holes must be opened and the inner surfaces flushed, which takes from 15 to 20 minutes. It is designed to operate at speeds of 550 to 1,000 metres per minute. The higher the speed, the better the priming of the mesh.

The design and manufacturing of the innovation was the work of a creative action group of workers and specialists from the "Petrozavodskbummash" (Petrozavodsk papermaking machinery) Association headed by designer and Candidate of Engineering Sciences G. Slugin.