

were established. The shift in favour of importing our papermaking machines is fraught with enormous problems. The nation will be faced colossal expenditures on maintaining the machines. This problem is already being encountered at the Svetogorsk Pulp and Paper Combine, and the Kondopoga Pulp and Paper Combine and Syktyvkar Timber Industry Complex will soon have to deal with it.

The point is that with the increase in operating speeds of papermaking machines, a problem virtually unknown to papermakers arises, namely failure of rotating components (shafts, axles and cylinders). Such components comprise not less than 50 per cent of the weight of a machine. To guard against wear failure of rotating parts, they must have a multiple safety factor. This in turn leads to unwarranted increases in the weight of the shafts. For example, the weight of a granite shaft for a machine with a 4,200 mm trim is 22 tonnes. With a 6,300 mm trim it is 40 tonnes and with a trim of 8,400 mm it is 61 tonnes.

It is questionable whether the safety factor of the rotating components in the wide trim imported machines will ensure their trouble-free operation for several decades to come. Attesting to this are practically all the newsprint machines purchased from Britain, Japan and Finland in the sixties. On the 8-metre machines the requirement for spare parts arises earlier than on the 6-metre ones. Of course, if our machine builders were able to manufacture today every kind of shaft for 8-metre machines the problem would not arise. But they cannot do this. The specialists are well aware that the production of drying cylinders for an 8-metre machine was mastered at the Petrozavodsk "Tyazhbummash" mill in the seventies. But this was at the cost of enormous