

The roller inlet box is used in the construction of rolling mills, preferably for finishing stands of the section or wire mills.

The roller inlet box contains a body, wherein there are placed roller holders with rolls, installed onto the axle by means of bearings. The roller holders are provided with longitudinal channels, and the axle is equipped with communicating axial and cross channels.

Novelty consists in the constructive realization of the roller assembly.

According to the first variant the roll and the axle are made collapsible. The roll is made of symmetrically placed bushes of light alloy, forming, in the pointing points over the external surface, a groove. Into the groove it is installed a ring with pass, made of wear-resistant material, the thickness of which is commensurable with the width of the pass. Into the hole of the bushes it is installed a sleeve. The axle is additionally equipped with a sleeve with hole mated with the cross hole of the axle. Furthermore, between the roll ends and the roller holders there are installed some ceramic washers. The sleeves are made of high-tenacity engineering ceramics and form a plain bearing. In such case, the component parts of the roll and of the axle are rigidly fixed between them, for example, with epoxy adhesive.

According to the second variant of the invention, the axle of the roller inlet box, instead of the sleeve, on the formatore surface, is equipped with a diamondlike layer on carbon basis. The result consists in increasing 5-6 times the service life and in reducing the down time of the rolling mill.