

FEEDING INSTALLATION FOR OP TYPE OF BOILERS

An idea of dust catalyst feeding has been developed for the OP type of boilers. The feeder operates at high speed which is adjusted to the speed with which coal is supplied to the chute container. The catalyst is fed at controlled speed with the use of injecting worm, through pipes ending with nozzles. It is achieved with compressed air in the technological process of coal feeding. The feeder enables fast and precise adjustment of catalyst dosage of constant and stable volume.

Feeder's stepping engine has the option of fluid speed control. It makes the worm feed precise catalyst doses. This chamber is connected to the ejecting cone to which catalyst flows in precise doses. In the bottom part of the cone there is a pneumatic ejector that is powered with compressed air (with the option to control the pressure with a pressure regulator) which sucks catalyst doses from the ejector cone and pumps them into two nozzles mounted on two flexible pipes. The dust feeder's work and, particularly the precise dosage control, is realised through a controller which is an integral part of the device. The dust feeder is mobile and can be located in various places as need arises. 230V power supply is required and a 10 bar compressed air supply. The best place of catalyst supply is a conveyor belt or a chute container.

Feeder's structure has been shown in the following diagram:

