Loss In Weigh Feeder

Loss in-Weigh Feeders operate on the principle of controlled loss-in-weight. The proposed system comprises of a Weigh Hopper, Loadcells, Screw Conveyor with motor and associated control electronics. The Weigh Hopper and Screw Conveyor are mounted on 3 Nos. of Loadcells. The Loadcells are connected to a controller through a junction box.

The material from the storage hopper is fed to the weigh hopper, which is controlled by a gate. A small screw feeder is mounted below this weigh hopper. The weigh hopper and screw feeder are mounted on high precision Loadcells and the output of the Loadcells are summed in a junction box and fed as an analog input to the controller. The controller calculates the rate, compares with the set rate and feeds the corresponding 4-20mA signal to the VVVF drive so as to control the speed of the motor of the screw, thereby controlling the rate of discharge.