

Abstract

The present invention discloses an insert plate friction leading-in mechanism which comprises a box and hydraulic motors, wherein the box is provided with pressure springs, friction wheel seats and driving gears. The box is connected with the friction wheel seats through the pressure springs, one or two groups of friction wheels are mounted on the friction wheel seats, the driving gears are driven by the hydraulic motors, and the one or two groups of friction wheels are driven by the driving gears to rotate in the same direction. A plate inserting machine applying the insert plate friction leading-in mechanism of the present invention has a frame with a height lower than that of the insert plate, so that the weight of the frame is reduced. Thus, only a small sized excavating machine is needed to be equipped, thereby reducing the cost of the equipment and construction. With the innovative plate inserting mechanism, the technical problems of being difficult in installation and maintenance and the like resulting from the long and large sized chain or the steel wire rope are solved, and the problems of chain and rope breakage, escape of the chain from a driving chain wheel, jump of the steel wire rope and the like of the traditional plate inserting mechanism are thoroughly solved. As an excellent insert plate friction leading-in mechanism, the present invention is applied to the soft soil construction industry.