

The invention relates to the field of processing agricultural production wastes, namely to the drying of comminuted plant material such as branches of fruit trees, grape vine, straw, etc., for the production of pellets or fuel briquettes, and may be used in various fields of industry for the drying of solid disperse materials.

The dryer for loose materials comprises a body (1) with a branch pipe (2) for feeding the mixture of loose material and drying agent and a branch pipe (3) for discharging the dried material. The body (1) is made in the form of truncated cone, oriented with the smaller base upwards the dryer.

The process, implemented by said dryer, comprises the tangential feeding of the mixture of loose material and drying agent by creating inside the body (1) of the dryer a vortex flow of the mixture, with the additional obtaining of a conical shape of the loose material, coaxially with the vortex flow. The process further comprises the heating of the loose material and the evaporation therefrom of the moisture by means of convective heat and mass exchange with the drying agent.

Claims: 2

Fig.: 2

