

The invention relates to the technology for production of building materials and may be used for preparation of dry mixtures for plaster, brick laying and other types of civil engineering works.

The production line for continuous preparation of dry building mixtures contains a bunker 1 for receiving from the storehouses of the waste with a humidity up to 30...50%, in the lower part of which, it is placed a loosener 2 for comminution of the wet clots and for waste uniform metering, under which it is placed a belt conveyer 3, a sieve block 4 with the holes diameter in decreasing order from 10...25 mm up to 3...10 mm, a bunker 5 of the auger-drier 6 for primary drying of the dispersed materials, joined with a branch pipe 7 with an auger-drier 9 for final drying, made constructively analogical with the auger-drier 6 for primary drying, an auger-conveyer 10 and an auger 11 for sediment transportation to one of the sections of the vibrosieve 12, including two or three sections with the cell dimensions of 0,2 mm for cement, gypsum and sediment and of 2...2,5 mm for the sand, placed above the metering bin 13, comprising three capacities of different volumes, provided with weighers 16, two augers 14 and 15 for loading cement, or cement and sand, or gypsum, or cement and gypsum, of other components depending on the composition of the dry mixture, and a mixer 17.

The production line may be additionally equipped with a distributing bin 19 provided with weights 20 for dry mixture loading into bags, or only with weights.

The device for continuous drying of dispersed materials contains a body with a double wall, made of two membranes, between which there are installed distributing diaphragms, fixed onto the surface of the body inner membrane. The inside diameter of the distributing diaphragm is equal to the outside diameter of the body inner membrane, and the outside diameter of the distributing diaphragm – to the inside diameter of the body outer membrane. The distributing diaphragms are fixed in staggered order for turbulent motion of the steam into the space between the body membranes. The device for drying, wherein there are made three openings for humidity evaporation from the waste, a hole for steam supply and removal of the condensate and noncondensed steam is provided with a temperature controller, a variator of the auger rotational speed control, installed into the body.

Claims: 10

Fig.: 6

