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

The production line includes a waste loading bunker (1) with a loosener (2) placed in the lower part thereof, a belt conveyer (3), feeding the loosened waste, a screen (4) including a sieve block, installed in decreasing order of the sieve cell diameter, a sifted waste storage hopper (5), a dry mixture component mixing plant, comprising a mixture component loading hopper (13), placed thereunder, a mixture component mixer (17), and a storage hopper for the obtained dry mixture (19). Novelty consists in that the line additionally comprises, placed between the storage hopper of sifted waste (5) and the dry mixture component mixing plant, a waste drying plant, including two devices for continuous drying (6 and 9), joined by a branch pipe (8) and placed each above another, each being equipped with a working tool in the form of a screw. The sifted waste storage hopper (5) is installed above the upper device (6), and under the lower one (9) there is placed a screw conveyor (10), orienting the dry waste to the feeding screw of the loading hopper (13) of the mixture component mixing plant. The loading hopper (13) is made sectional, one of the sections of which is joined with the dry waste feeding screw (11), the others – with the screws for feeding at least one binder (14) and sand (15). Each section is equipped with component metering devices (16), placed in the lower parts thereof. Above the hopper (13) there is mounted a vibrosieve (12), including separate sieves, placed above each section of the hopper (13). The mixture component mixer (17) is joined with the storage hopper for the obtained dry mixture (19) by an auger conveyor (18).

The device for continuous drying of dispersed materials includes a horizontally placed cylindrical body with feeding and discharge holes, inside which there is mounted a rotary working tool, joined with the rotation drive thereof, the body wall is made double and comprises the inner and outer jackets, the cavity formed between them is filled with heat-transfer agent, in the upper part of the body there is installed a heat-sensing device, into the outer jacket there is made a heat-transfer agent feeding hole. Novelty consists in that the working tool is made in the form of screw. As heat-transfer agent is used the steam. Along the annular cavity between the body jackets there are placed diaphragms, made in the form of annular sectors, placed diametrically, in labyrinth and fixed to the walls of the jackets. In the upper part of the inner jacket, along it, there are made three openings for discharging the steam evaporated from the processed materials. In the upper part of the outer jacket there are made three steam supply and discharge holes, and in the lower part thereof – a condensate drainage hole.

Claims: 6
Fig.: 6