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Title

DRYING INSTALLATION FOR GRANULAR PRODUCTS IN THE SUSPENSION LAYER

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Description

The invention relates to a drying process of granular products in a suspension layer, and can be applied to companies in the food industry that have a bearing on the drying process. The drying process of the granular products

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in the suspension layer is provided by an installation, which according to the invention is composed of: housing 1 and a tube 6 composed of the upper area A, the middle areas B and C, and the lower area D. The housing is fixed control panel 3, which starts up inverter 2, fan 4 which sucks air through the filter 11 being driven by the motor 13, the lock 5 which is set according to the motor 12 and the magnetons 7 and 15. The fan 4 is mounted tube 6, to which the lock 5 is connected, to charge the product. Also on tube 6 are mounted reflectors 8 and 14, in which the magnetron 7 and 15 are incorporated. The passage of the product from zone C to zone B is provided by channel 16. At the top of tube 6 is mounted the outlet pipe 9 of the product, and cyclone 10.

The formulated problem is solved by the fact that the drying of granular products in a suspension layer is provided by a drying plant which is made up of a housing on which is mounted the control panel that starts up the locking power supply the product installation and the centrifugal fan that drives the product in a suspension layer due to a variable air flow, by adjusting the fan speeds using the inverter. Thus, the product from the lock arrives in the lower area of the tube, where it is driven vertically upwards by the fan. From the lower area of the tube, the product is found in two middle zones of it, whose value of the cross-section is greater than that of the lower and upper area. On the two middle areas of the tube are mounted a reflector and a magnetron which undergo the product of the drying process. In the given areas, the product is engaged in a compound movement, which covers all their height, due to the decrease of the linear speed in the section of the tube. Respectively when the mass of the product in the first middle zone begins to decrease due to the drying process, it is entrained in the second middle zone, where it is again subjected to the drying process, after which it is entrained at the top of the tube where the linear velocity is larger, due to the narrowing of the cross section. Thus the dry product is conveyed from the installation through the exhaust pipe, at the exit being separated from the air by the cyclone. This is an ongoing process.

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