

A low cost electronically controlled multi function dryer

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A simple automated device has been designed and constructed to dehydrate different types of food for industrial applications. Preliminary tests indicated that the device could dehydrate a food under a desired temperature. The dehydrating temperature range and processing time could be adjusted to a predetermined value to match the characteristics of food. Another important feature of this device is that it could be coupled to any source of heat (ex. firewood, dry rot, electricity, LP gas etc.). This device could be modified to use for many applications in domestic and large-scale industries. Indicators in the controlling panel displays the status of the dehydration process and a buzzer attached to the device makes a warning sound to remove the dehydrated materials from the dryer at the end of the process. The device has been designed in a user friendly manner and the automated controlling system helps to save operator's time as no monitoring is needed during processing. The main advantage is that the device can be easily manufactured locally at low cost.

Key words: automated, dehydration, processing time and dryer

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