

INTEGRATED HOT AIR ROASTING MACHINE

Roasting of oil seeds, pulses, cereals, spices and snack foods are traditionally practiced in India for enhancing the storage life, improving the organoleptic properties and for ease of incorporation in preparation of breakfast and ready-to-foods. The current roasters in the country are batch type heated pans. In large-scale units, medium of heat transfer invariably is sand, which in turn is heated indirectly by electricity or diesel. These sand roasters have the problem of non-uniform product characteristics with high percentage of sand and ash content in the product. Due to fine sand and ash adhering to the product the product is unhygienic. Further, these units are not suitable for roasting and puffing operations due to non-uniformity of heating process. Central Food Technological Research Institute, Mysore have successfully developed a device for roasting/toasting cereals, pulses, spices, oil seeds and ready-to-eat snack foods.

Salient features

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| ⇒ Capacity of roasting | 150 kgs/h (wheat) |
| ⇒ Type of raw material | Cereals, oil seeds, pulses, spices |
| ⇒ Stages of operations | Roasting, Resting & Cooling |
| ⇒ Motor horsepower | 6 HP |
| ⇒ Supply voltage | 440 VAC/3 Ph/50 Hz |
| ⇒ Air velocity | 2-3 m/s |
| ⇒ Hot air temperature | 150-450° C |
| ⇒ Re-circulated hot air temperature | 100-380° C |
| ⇒ Fresh air intake | 25-30% |
| ⇒ Type of ignition | Auto ignition |
| ⇒ LPG consumption | 1.75-2.00 Kgs/h |
| ⇒ Material of construction | Stainless steel |
| ⇒ Weight of the machine | 300 kgs (approximate) |
| ⇒ Floor space needed | 3.5×3.0×1.6 m |