

## SPOUTED BED COFFEE ROASTER

The spouted bed technique is an alternate to fluid bed, although the areas of application of a spouted bed overlaps with fluid bed, the mechanism are different. There is very good solid mixing, effective gas particle contact facilitating high temperature short time processing high temperature short time (HTST) processing. The spouted bed technique has been developed primarily for solids for better performance. The Importance of the spouted bed technology, are heat would be applied as quickly as possible resulting enhanced aroma & flavour, retention of high organoleptic and nutritional attributes in the product. Having made the roasting chamber transparent degree of roasting (colour analysis) can easily be controlled. Spouted Bed Roaster that works on HTST principle removes unwanted materials such as dust & dirt, while roasting to yield the best product. With these special features of the machine, it is observed that the HTST processing technique gives higher percentage of soluble solid than the commercial drum roasted samples.

There was a significant change in soluble solids, swelling ratio and breaking strength compared to the commercial drum roaster. The cup quality also showed excellent results compared to the drum roaster. Also, the present data of the Spouted Bed Roaster is in good agreement with the many other internationally report data. This process makes the roasting for best quality coffee cost effective.

In addition, this versatile roaster can also be used for roasting of any other food grains like Bengal-gram, Groundnut, Cowpeas, Cashew, Makhana etc.. More effectively and efficiently with better organoleptic properties.