

# Microcontroller based “VARUN”

A Device for assisting in consistent  
Drying of Made Tea without under and over firing



**VARUN**

The present drying practice is to maintain pre-determined temperatures of Dryer Inlet Air which does not give correct and consistent drying results always, because of changing ambient air conditions (RH) during the drying process. This results in over firing or / and under firing (Stewing) in final ‘Made Tea’ and, thus making inconsistent quality of ‘Made Tea’.

**To overcome** this existing problems of **over firing or stewing** of tea inside the dryer with inappropriate setting of inlet air temperature during the drying process, **Stesalit** have successfully developed a Microprocessor based Electronically Controlled System called ‘VARUN’ (Idea conceived by Mr. Ranjit Chaliha, a distinguished tea planter of Assam). VARUN continuously measures ambient air conditions i.e., temperature and real time humidity, through sensors and electronically computes the data and displays the correct ‘should be’ dryer inlet air temperature on real time basis. By setting the correct temperature as displayed in ‘VARUN’, the tea factory can get consistent and uniformly dried ‘Made Tea’ without any over firing / under firing (Stewing). This results in consistent and better quality of ‘Made Tea’ and higher price realization.

## Salient Features/ Advantages

- ✦ Elimination of over firing or stewing of teas inside the drier.
- ✦ More consistent drier output irrespective of atmospheric conditions.
- ✦ Maximum Utilisation of potential drying capacity of inlet air.
- ✦ Considerable saving in fuel cost.