Stesalit
SMART Technologies

Coal Air Ratio Controller (CARC-04)
for Significant Coal and Power Saving

CARC - 04

It is essential to maintain the inlet temperature of hot air in dryer for getting better quality of 'Made Tea'. Presently the pre-determined Inlet Temperature (T1) of Hot Air in dryer is maintained by the factory personnel manually, based on their experience, by manually controlling ID Fan, FD Fan & Chain Grate Stoker connected with heater. But due to manual control, the inlet temperature of dryer keeps fluctuating and is not maintained as per requirement, causing inconsistency in drying, and under fire / over fire 'Made Tea', which ultimately affects the Quality of the 'Made Tea' produced. Since the manual control does not ensure the optimum use of fuel because of uncontrolled running of ID Fan, FD Fan and Chain Grate, it also consumes more coal.

To overcome this, **Stesalit** has developed Electronically Controlled Coal Air Ratio Controller (CARC-04) which ensures maintenance of required temperature of dryer inlet (T1) through a close loop electronically control system by varying, electronically, speed of Chain Grate, FD Fan and ID Fan to maintain required temperature in the furnace. CARC-04 – constantly maintains, a preset desired temperature (within ±1ºC), throughout the operation (without possibility of under fire / over fire tea), and ensures saving in the coal consumption up to the extent of 10%.

Payback period of CARC 04 is less than 6 month.

Salient Features/Advantages

- Maintained constant temperature at Dryer Inlet (T1) results in consistent and enhanced quality of 'Made Tea' .
- Minimize production cost by optimum use of coal and electrical energy.
- Minimize air pollution by ensuring the proper combustion of coal
- Reduces Heater maintenance cost.
- Saves coal consumption upto 10%.