

Continuous Physical Withering System

Modern and most efficient method of withering over conventional system, in the tea industry. The system saves massive structural cost for trough houses, saves almost 2/3 of floor area, and saves expensive man power and electricity. **Finally**, savings in withering cost. True engineering concept which gives absolutely consistent and evenly withered leaf.

Technical Features:

- System consists of three different and independent stage; top, middle and bottom stage.
- Green leaves are entering from top, by a feed conveyor and moving through middle and discharging from bottom stage.
- Leaf is passing by a 3-meter-wide mesh belt with zero tracking edge.
- Every stage is divided in two zone, feed and discharge zone. And each zone is divided in number of module with a certain length.
- A separated air chamber is fitted in each module of each stage to provide hot air to leaf bed from bottom.
- Hot air from bottom keeps leaves loose on bed, which allows air to come in contact with all leaf.
- A common hot air duct is supplying air to every module, in each zone.
- A high pressure and high discharge volume air blower is fitted with steam radiator supplying hot air to each air chamber.
- Total five hot air blower is connected in system.
- At discharge end, the blower is supplying ambient temperature air to keep leaves cool before entering to CTC machine.
- All blower motor is connected with VFD. It's easy to control supplying air volume and temperature inside machine.
- Two up turner is fitted in top & two in middle stage to shuffle the leaves, not allowing any leaf un-withered. One up turner is fitted at middle of bottom stage to shuffle again.
- All stage is driven by independent geared motor fitted with VFD. So, it's very easy to control feed rate and time of each stage at any time.
- Two exhaust fan is fitted in each stage to remove accumulated moisture inside, which does not makes inside suffocated by moisture. Makes withering faster and free from foul smell.
- One cleaning brush is fitted at discharge point, not to allow leaf on floor.
- All parts contact to leaf are made of Stainless Steel AISI304 grade.
- Multiple inspection windows are provided to monitor withered quality in every stage.
- Complete hot air duct is insulated and entire system is fully covered to avoid heat loss.
- Centralized operating console fitted with PLC and HMI. Easy to monitor and operate entire system, i.e, time, feed rate, temperature etc. instantly.
- Complete operation time can be set from 1.5 Hr to 4 Hr.

Note: Due to a continuous process of improvement of product, the designs and specifications are to change without prior notice.