



Tea processing machinery from plucking to packing..

# Trinitea-PVB

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*The Wide Bodied*  
Continuous Fermenting Machine

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**ISO 9001**

# Trinitea-PVB

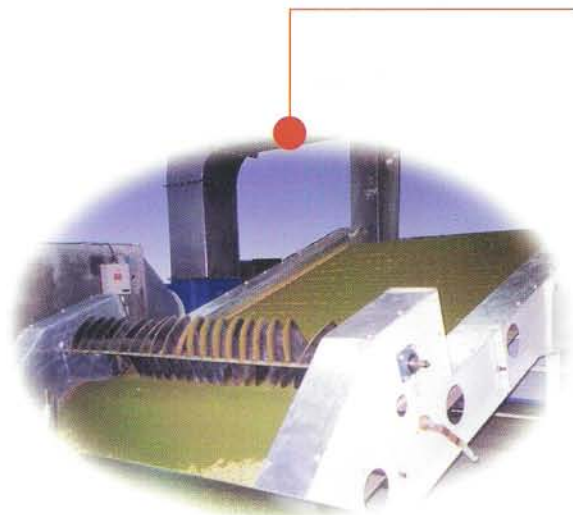
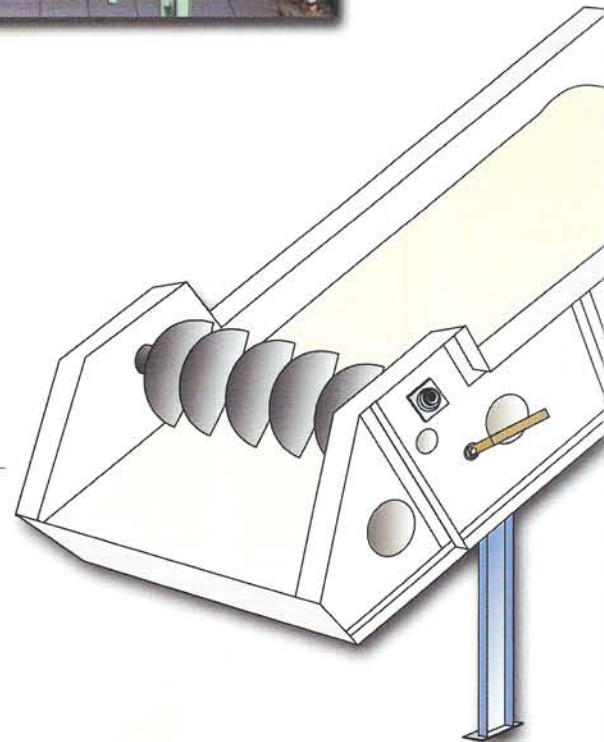
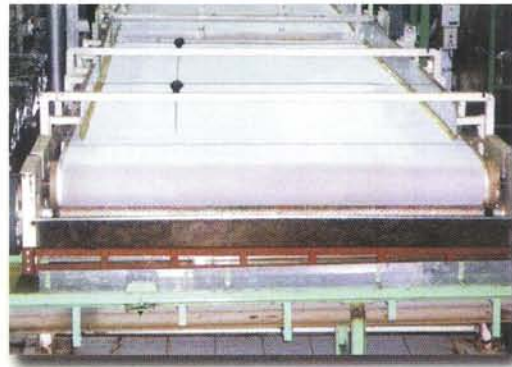
Unmatched Quality  
Optimum Productivity  
Convenience of Mechanisation  
Precision through P. C. Control

*TRINITEA - PVB, the answer to all your fermentation needs. Much higher open area for more even fermentation and reduced length of machine. The popular "modular" concept pioneered by T&I is retained, allowing you to enhance capacity according to needs. The Trinitea-PVB is supplied with individual modular fans for complete flexibility in air control. Humidified air from a specially designed mist chamber completes the system... AND, the Trinitea PVB can be fitted with a control system to monitor the basic parameters.*

## MAGIC MESH-The Heart of The Trinitea PVB

*The specially Imported Magic Mesh with 46% open area has these advantages :*

- *Open area nearly 80% more than existing SS trays/belts, ensures even fermentation across the tea bed, and improved cup characteristics and infusions.*
- *The Magic Mesh is available in upto 8 ft. width. This enables wider machines and shorter lengths to overcome the space constraints in some existing tea factories.*
- *To support the Magic Mesh conveyor, specially designed idlers and stainless steel skid plates are provided.*



### Full Width Feeder

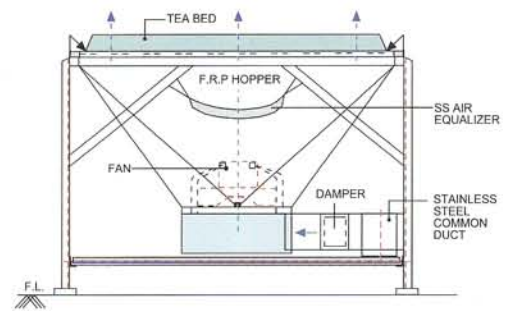
Full width PVC Feed Conveyor 8' feet wide with spiral spreader to ensure regulated feed and even spreading of 'dhool.' on the machine. Extended belt can be provided to reduce feed height and enable direct feed from CTC or Goojie.

### Humidification

For continuous supply of fresh humid air into each module, a Mist Chamber or Y - Duct with Two Humidifiers can be provided to suit the prevailing site conditions.

### Modular Air Control Fans

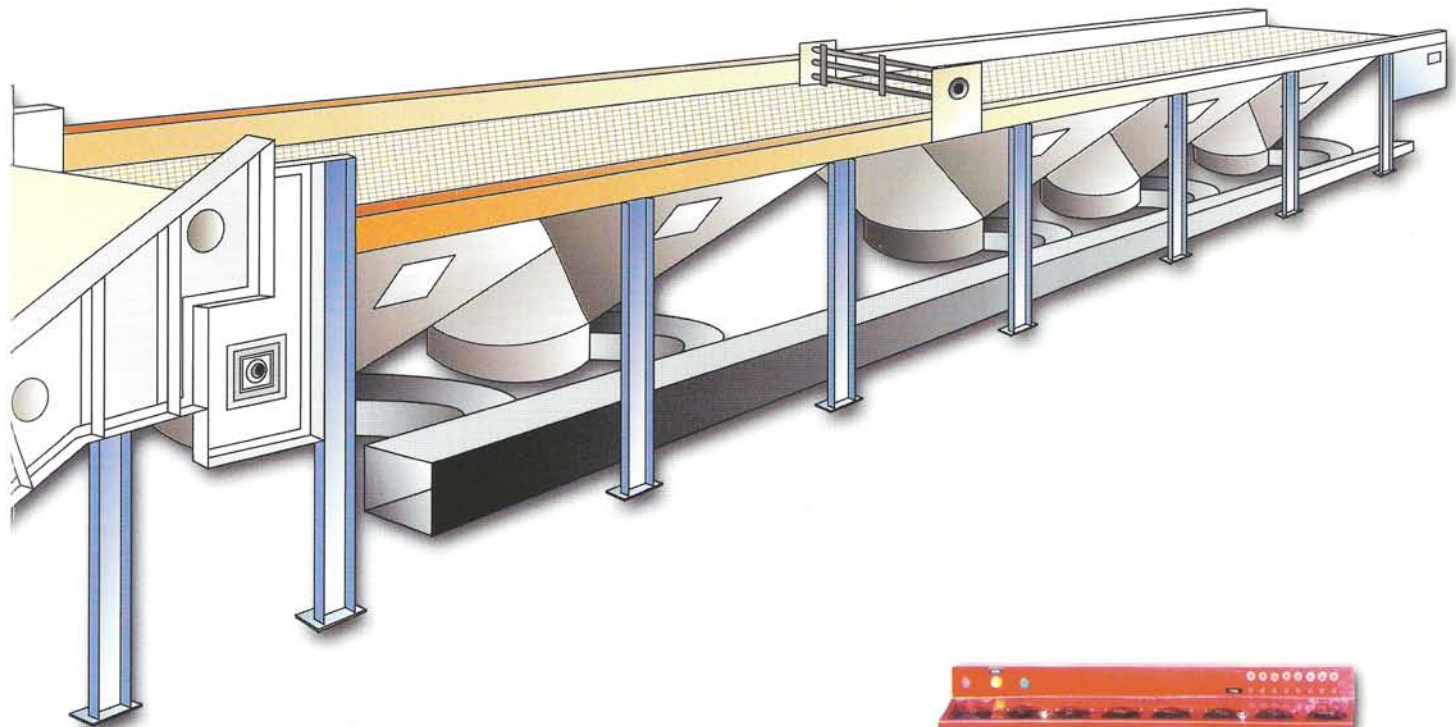
For precise control of air flow in each module, alongwith the main centrifugal fan, each module is fitted with individual fan to draw the required quantum of humidified air. The common duct runs parallel to the machine and specially designed moon ducts are used to feed humidified air to each module. The moon duct concept eliminates accumulation of tea in the ducts. Dampers are also provided for each module.



MODULAR AIR CONTROL

### Effective Upturner

To ensure even fermentation through the cross-section of the bed, a slow speed specially designed upturner is provided with SS blades. The design of the upturner ensures that grades are not disturbed in the process.



### Centralised operating console with new Variable Speed Drive(OPTIONAL)

All controls are centralised into one panel. For easy operation and to obtain exact fermenting time, an A.C. variable speed regulator is provided as optional. This helps to avoid the tedious job of changing pulleys or shifting V-Belts to vary the fermenting time.



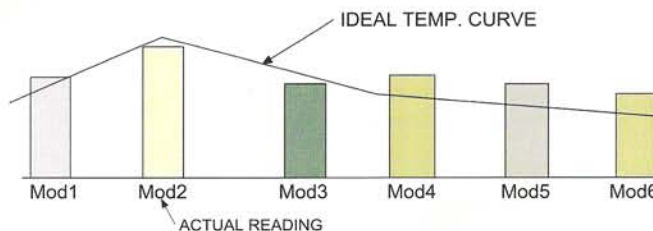
CENTRALISED PANEL WITH AUTOMATIC CONTROL

## FOR THE FIRST TIME - DATA LOGGING SYSTEM FOR CFM

The complete machine can be animated on the PC screen with the actual value of temperature of each module, ambient temperature, machine humidity, ambient humidity and air-flow rate displayed on the screen on real-time basis. It will also display the optimum/set values of the above parameters.

### BENEFITS

- Desired quality of Fermentation can be achieved.
- Machine statistics can be generated for performance analysis providing the facility of tuning the machine as per requirement.
- Reduction of valuable manpower resources.
- The entire machine can be monitored by the plant management level through the PC from remote location.



A SAMPLE SCREEN OF DATA LOGGING SYSTEM

### Technical Specifications of TRINITEA - PVB

	4M (mm)	5M (mm)	6M (mm)	7M (mm)	8M (mm)
Overall length W/O Feed Conveyor	10161	12185	14209	16233	18257
Overall Length with Feed Conveyor	14083	16107	18131	20155	22179
Overall Width	3580	3580	3580	3580	3580
Overall Height	2060	2060	2060	2060	2060
Effective Tea Bed length	9256	11280	13304	15328	17352
Effective Fermenting Width	2245	2245	2245	2245	2245
Effective Fermenting Area	20.78m <sup>2</sup>	25.32m <sup>2</sup>	29.87m <sup>2</sup>	34.41m <sup>2</sup>	38.96m <sup>2</sup>
Feeding height of Feed Conveyor	515	515	515	515	515
Discharge Height from Floor Level	870	870	870	870	870
Tea Bed Height from Floor Level	1430	1430	1430	1430	1430
Fermenting Time Range	37 mins. To 143 mins.				
Capacity (Withered Leaf) kg **	1250	1550	1850	2150	2450

\*\*At 4" thick spread, 50 mins fermenting time.  
Outputs would vary with changes in these parameters.

### Power Requirement

- |  |                                  |
|--|----------------------------------|
| 1. Main Motor 1.5/2.3 HP, 720/1440 RPM | 6. Humidification Fan:           |
| 2. Upturner : 1 HP/1440 RPM            | a) 4 & 5 Module - 7.5 HP         |
| 3. Feed Conveyor : 1 HP/1440 RPM       | b) 6 to 8 Module - 10.0 HP       |
| 4. Cleaner : 1 HP/1000RPM              | 7. Exhaust Fan : 0.5 HP/1400 RPM |
| 5. Discharge (Optional) 1 HP/1440 RPM  | 8. Humidifiers : 2 x 0.75 HP     |

\*Due to a continuous process of product development, the design is subject to change without prior notice



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