

# FLUID BED DRYER

drying operation by thermo pneumatics



CE

**TAPASYA**

Tapasya FBDs are the state of the art drying units comparable to any internationally made FBDs, with all the features available.

Our FBDs are built with a working pressure of 3.0 Bar at 800c. Our in-house innovation team has been able to enhance the drying capabilities of our FBDs by 18 - 20% thus resulting in lesser drying time, giving a better shelf life to the product. The air handling unit has been designed keeping in mind, tool less construction for ease in cleaning / replacing the filter assembly. The finger bag assembly is with quick release clamps for easy removal and fixing of the finger bag. The machine has been designed ergonomically resulting in ease of operation.



## SALIENT FEATURES

- Tri level filtration using: 20 micron for Pre Air filtration 5 micron for Secondary Air filtration 0.3 micron for Final Air filtration through HEPA
- Air Dehumidification on special demand.
- Inlet / Outlet dampers have proportional control valve.
- Proportional control temp controller.
- Inlet / Exhaust Location: Several alternatives to suit customer requirements.
- Wash in place
- Control: By PLC monitor with printer as optional.
- Specially designed explosion flaps.
- Intrinsically safe system of earthing with low voltage.
- Steam radiator In SS to SS construction.
- Inflatable Silicon Seals used in the system.
- 2 Pneumatic Cylinders 1 for the Bag Up and Down movement and the other for Impact Bag Shaking

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- Complete SS 304 Ducting for Air Exhaust
- Specially designed Broken Bag Detector
- Double skinned SS 304 AHU with a built in Face and By Pass damper for  $\pm 1^\circ$  Temperature control.
- Specially designed anti static anti sparking blower.
- High static high efficiency blower installed.
- Completely Tool less AHU.
- CE Certified.
- Ergonomically mounted observation windows provided for viewing drying operation
- Flush Sampling port provided for extracting small quantities of coated product during operations.



## Technical Specification

MODEL	SAI - 10	SAI - 30	SAI - 60	SAI - 120	SAI - 150	SAI - 200	SAI - 250
Capacity in Kgs.	5 to 10 Kg.	30 Kg.	60 Kg.	120 Kg.	150 Kg.	200 Kg.	250 Kg.
Total volume of product container in Ltrs. working Vol. 70%	32 Ltrs. Gross	107 Ltrs. Gross	132 Ltrs. Gross	344 Ltrs. Gross	433 Ltrs. Gross	600 Ltrs. Gross	777 Ltrs. Gross
Blower Motor Rating in HP	10HP	15HP	20HP	15HP	30HP	30HP	50HP
Steam Consumption Kgs. / Hr.	97	130	162	194	194	194	194
Heating Capacity Kcl. / Hr.	49400	65850	82320	98785	110000	120000	120000
Net Weight in Kgs. (Approx)	800	2000	2500	2700	2800	3000	3000
UTILITIES REQUIRED							
Minimum Steam pressure Kgs. / cm <sup>2</sup>	4 Kgs./cm <sup>2</sup>	4 Kgs./cm <sup>2</sup>	4 Kgs./cm <sup>2</sup>	4 Kgs./cm <sup>2</sup>	4 Kgs./cm <sup>2</sup>	4 Kgs./cm <sup>2</sup>	4 Kgs./cm <sup>2</sup>
Compressed Air pressure Kgs. / cm <sup>2</sup>	4 Kgs./cm <sup>2</sup>	4 Kgs./cm <sup>2</sup>	4 Kgs./cm <sup>2</sup>	4 Kgs./cm <sup>2</sup>	4 Kgs./cm <sup>2</sup>	4 Kgs./cm <sup>2</sup>	4 Kgs./cm <sup>2</sup>
C.F.M.	1500	2000	2500	3000	5100	6000	6000
Dimension (mm) A (L)	3500	3600	4100	4500	4700	5200	5200
Approx B (H)	2000	2600	2800	3600	4000	4300	4300
Maximum C (W)	1000	1150	1200	1550	1660	1900	1900
D (FH)	860	1325	1325	1490	1490	2120	2120
Shell ID	425	650	700	1000	1100	1340	1340



Specification and technical data are subject to change without prior notice



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