®

INDUSTRIAL OVEN / TRAYS DRYER

'TSI' BRAND EQUIPMENTS, BEST USE FOR YOUR LABORAORY

- **Microbiology Laboratories**
- **Bio-technology Laboratories**
- **Bio-medical Laboratories**
- **Chemical Testing and Chemical Engg. Laboratories**
- **Pharmaceuticals Manufacturer's**
- **Medical & Dental Colleges Laboratories**
- **Research Laboratories**
- **Educational & Research Institute's**
- **R & D Centre's & Q.C. Assurance**
- **Soil, Bitumen, Concrete Laboratories**
- **Environmental Testing Laboratories**
- **Civil Material Testing & Calibration Laboratories**
- **Food, Water & Waste Water Testing Laboratories**
- **Material Management and Metrological Laboratories etc ….**

GSTIN No.33BNUPA8038G1ZW **E-mail: thermalscientific2021@gmail.com**

GeM Seller Id: **JSSP210003098413** **www.thermalscientific.in**

M. ARAVINDH - 99522 04307 **M. KASTHURI - 8925710946**

COMPLETE SOLUTION FOR LABORATORY EQUIPMENTS

THERMAL SCIENTIFIC INSTRUMENTS, CHENNAI

CAT. No.1030: "TSI™" INDUSTRIAL OVEN (TRAY DRYER)WITH HEAVY DUTY BLOWER MOTOR AND MICROPROCESSOR BASED PID CONTROLLED DIGITAL TEMPERATURE INDICATING CUM CONTROLLER BUILT IN DIGITAL TIMER - DUAL SET POINT [SV & PV)



An Industrial oven / Tray Dryer is essential equipment widely used in pharmaceutical, chemical and food industries to dry materials that are oxidizable, heat sensitive and hygroscopic in nature. Condenser, are primary requirements to manufacture this equipment., it is available with **12, 24, 48 and 96 trays** designs on the market.



We are Manufactures of Scientific Aids and Laboratory equipment for heating and cooling including Industrial oven / tray dryer and engaged in supplying **customized required equipment** at factory price. We have in-house manufacturing facilities; where, our engineering team constructs tray dryers with matched specification provided by our customers.

Features:

➢ Triple walled construction	➢ Stainless steel construction (SS 304)
➢ Easily removable Stainless steel 304 grade Air heating elements	➢ Dedicated heating and circulating systems
➢ Thermal efficiency of 60 to 80 per cent	➢ Provision for Explosion Vent / Rupture Disc on body
➢ Provision for Validation Port on Body	➢ Uniform heating flow
➢ High quality interlocking for doors to chamber	➢ Door limit switch
➢ Single and double doors (for large models)	➢ Heavy duty MS / SS door fitted on hinges
➢ Heavy duty flower system fitted top side of the oven	➢ Microprocessor based PID controlled Temp. controller

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CONTRUCTION: It is triple walled construction (two vertical & top sides only). Angle iron framed with inner mild steel with heat resident aluminium paint, middle chamber made out of mild steel and the outer chamber made out of mild steel with attractive color finished spray paint

INSULATION: It insulated by high grade glass/mineral wool in-between inner and middle chamber to minimize the heat loss

HEATING ELEMENT: Specially designed air heater fitted two vertical sides, the heating coil manufactured by Kanthal A-1 heating coil for long life.

AIR CIRCULATION: Fitted with heavy duty blower motor with impeller fitted top of the oven with fume exhaust it will be maintaining uniform temp. thought the inner chamber.

TEMPERATURE CONTROL: By Microprocessor based PID controlled digital temperature indicating cum controller built in digital timer (Two set valve [SV & PV] with 'A' grade PT-100 sensor for more accuracy

CONTROL PANEL: A separate control panel fitted with the following necessary electrical and control accessories:-

- Digital
- Temp. Controller cum Indicator
- 02. Ancillary Thermostat .
- 03. Door limit switch .
- 04. Mains Indicating lamps (R Y B) .
- 05. Heater Indicating lamps .
- 06. Mains ON/OFF switch .
- 07. Heater ON/OFF switch
- 08. HRC fuse
- 09. Heavy duty Contactor
- 10. Volt & Ammeter (Compound)
- 11.Buzzer for ending cycle

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POWER SUPPLY: 220V, 1 Phase, 400/440 Volt 3 Phase, 50 Hz AC mains

Model	TSIIO/12T	TSI/IO/24T	TSI/IO/48T	TSI/IO/96T
Number of Trays	12 Trays	24 Trays	48 Trays	96 Trays
Working chamber size	3’ x 3’ x 2’	3’ x 4’ x 3’	3’ x 6’ x 3’	4’ x 8’ x 3’
Power Rating	5.0 KW	8.0 KW	12.0 KW	21.0 KW
Housing Construction	Mild Steel / Stainless Steel 304			
Doors	Mild Steel / Stainless Steel w/ inter lock & glass wool insulation			
Hinges	Stainless Steel			
Trays	Food Grade Stainless Steel			
Tray Size	32 x 16 x 1.25 (inch)			
Insulation	Thick glass wool			
Controls	PID Controller			
Temperature Indicator	Digital			
Limit Switch	Yes			

OPTIONAL ACCESSORIES

01	Aluminum Trays Size: 32” x 16” x 1 ½”
02	Stainless Steel Trays Size: 32” x 16” x 1 ½”
03	Digital Timer Range 0 – 9999 min.
04	Trolley – Capacity 12 Trays
05	Trolley – Capacity 24 Trays
06	Trolley – Capacity 48 Trays
07	Trolley – Capacity 96 Trays

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OUR RANGE OF PRODUCTS

- Autoclave – Bucket / Portable & Vertical
- Autoclave Horizontal – Cylindrical / Rectangular
- Air tight cabinet
- Bacteriological Incubator – Lab & Memmert
- Backing oven – single & double deck
- Bio-Safety Cabinet Class A & B
- Bunsen burner electric
- B O D Incubator
- Cement Autoclave
- Centrifuges
- Cylindrical Furnace – Vertical & Horizontal
- Circulating water bath
- CO^2 Incubator
- C & S furnace
- COD apparatus – Mantle / Hot plate
- Constant Temp. Water Bath
- Ciller
- Crucible Furnace
- Curing Tank for cement / concrete moulds
- Curing oven
- Dead body freezer
- Deep Freezer – Vertical / Horizontal
- De-humidifier – Bucket type
- Dental Autoclave
- Double deck oven / Incubator& Furnace
- De-waxing bath
- Environmental / Stability / Climatic Test chamber
- Electronic weighing balances
- Flocculator / Jar Test Apparatus
- Fume Hood – Table top / Floor standing
- Furnace – lab / Heavy duty / High temp. & Industrial models
- Furnace – spilt type Vertical / Horizontal
- Glassware's drying oven 180°C fixed
- Heating Mantle
- Hot Air Oven – Lab / Memmert & High Temperature
- Hot Plate – Circular / Rectangular
- Hot & Cold chamber
- Humidity chamber (Cabinet) with/without Refrigeration
- Industrial Furnace & Oven
- Incinerator – Domestic / Industrial
- Incubator Shaker
- Island Table with Chemical cupboard (Centre table with wash basin & glassware's drying stand)

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- Laboratory work table
- Laminar Air Flow Chamber (Cabinet) Horizontal / Vertical
- Le-chatelier bath 27°C for Cement Testing
- Low Temp. Water Bath
- Mortuary Chamber 2 / 4 / 6 / 8 bodies
- Muffle Furnace – Lab / Heavy duty & High Temperature
- Mushroom Autoclave
- Oven – Lab / Memmert / High Temp. & Industrial
- Oil Bath – Circular / Rectangular
- Orbital Incubator Shaker – with / without Refrigeration
- Rotary shaker
- Sand Bath
- Seed Germinator – Single / Double
- Soxhlet Extraction Unit
- Tubular Furnace – Horizontal 1000 / 1200 / 1400°C / 1700°C
- Tray Drier – 12 / 24 / 48 / 96 Trays
- Vacuum Oven / Furnace
- Vacuum Pump
- Water bath single wall – Circular / Rectangular
- Water bath double wall – Circular / Rectangular
- Water Bath – Low Temperature -10 / -20 / -40°C
- Water Bath – Constant Temperature
- Water Bath – Serological
- Water Bath shaker with / without Refrigeration
- Water Bath – Curing 100°C
- Water Bath – Hot & Cold 10 to 90°C
- Water Distillation unit – Glass Horizontal single / double / trible distillation
- Water Distillation unit – NPL design – Vertical single / double / triple distillation
- Water Distillation unit SS – Wall mounting / Table top model
- Warming Table / Plate
- Waxing Bath
- Wax Melting Oven 60 to 80°C constant Temp.
- Bulk Chemicals & Glassware's

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