

Specifications EN-3000 Machine

EN-3000 is single station bi-axial rotational moulding machine with one U arm, which has capacity to mount a mold of 3000 liter or 2500 liter or 2000 liter.

EN-3000 is most fuel efficient rotational moulding machine with low man power requirement and hence the production cost is very low.

EN-3000 includes the following equipments:-

1. Oven Chamber:

The oven chamber is constructed of stainless steel. To reduce heat losses an insulation of 75 mm is used. The oven is very compact and hence fuel efficient. The oven door has an inspection window. Top loading system is provided with ladder for producing multi-layer tank. For better appearance and long life the oven is painted with Polyurethane paint.

2. Burner:

Italian "REILLO" make burner **RL40 G20**, which is suitable for **Diesel** used. The burner is most fuel efficient with low noise and smoke free firing. For higher efficiency and low maintenance a two stage 10 micron filter is used. It has flame failure indication along with safety feature which meets International safety standards. LPG and natural gas burner **FS 20** is optional at extra cost.

3. Re-Circulating Blower:

The impeller is made of stainless steel and is dynamical balanced. It is a high capacity, low R.P.M and low noise blower. The blower shaft is supported on both sides with maintenance free high quality bearing. 3.0 Hp LHP standard motor is used to run blower. Standard taper lock "FENNER" make pulleys are used.

4. U Arm:

Heavy duty U arm can take up a mould of 3000 liter or a mould of 2500 liter or a mould of 2000 liter. Moulds rotate in both X and Y directions with 5 and 4 R.P.M max respectively. Variable speed A.C drive duty motors are provided. Heavy duty gear box is used for smooth operation. Chain drive is used for low maintenance. Mould mounting is very easy & fast.

5. Control Panel:

A user friendly control panel with adjustable mounting is provided with furnace. **Toshiba and Schneider** made drives are used for controlling speed of major and minor axis motor. For getting uniform thickness auto reversal facility is provided. Digital voltmeter for three phases, digital temperature controller, phase indicator lamp, and cycle timer are provided for easy operation & control. Hooter, flame failure lamp, safety interlocks are provided for safety propose.

Operating Parameters.

- | | | |
|----|-----------------------|---|
| 1. | Production Per Cycle: | 3000 ltr x 1 or 2500 Ltr x 1 or 2000 ltr x 1 . |
| 2. | Total Cycle Time: | 90 min. (Heating: 35 min, Cooling: 30 min, Loading and unloading:25min.) |
| 3. | Production Per day: | 48,000 lit. Max (24 hrs). |
| 4. | Production Capacity: | 16 tanks of 3000 lit. |
| 5. | Electrical Load: | 7 Hp(415 volt 3 phase). |
| 6. | Diesel Consumption: | 8 liter/cycle |
| | OR | |
| | Gas Consumption: | 6.75 kg/cycle |
| 7. | Process Temperature: | 180 degree. |
| 8. | Space for Machine: | L 5.6 Mtr x W 5.1 Mtr x H 4.6 Mtr. |

9. Machine suitable for: Double layer, Triple layer, Four layer and Foam /Insulated tank.
 10. Manpower: 2 Semi skilled persons.

Technical Specifications :

Model No. : EN-3000

Spindles.....	1
Maximum Weight on U Arm.....	400 Kg
Spider Diameter.....	1900 mm
Major Axis R.P.M. (x-axis).....	0-5
Minor Axis R.P.M. (y-axis).....	0-4
 Furnace / Oven	
Maximum Kcal / Hr.....	2,00,000
Usage Normal (Kcal/cycle).....	52,000
Maximum Temperature °C.....	250.0
Circulating Blower C.F.M.....	9000
 Electrical	
Supply Voltage.	415 V, 50 Hzs 3 Ph & Neutral
Oven Circulating Blower H.P (1 Nos.).....	3.0 HP
Major Axis Drive AC Motor H.P.....	2.0 HP
Minor Axis Drive AC Motor H.P.....	1.0 HP
Burner H.P.....	0.5 HP

Scope Of Our Supply :

Scope of supply includes machine and control panel as specified above.

Customer will have to provide for

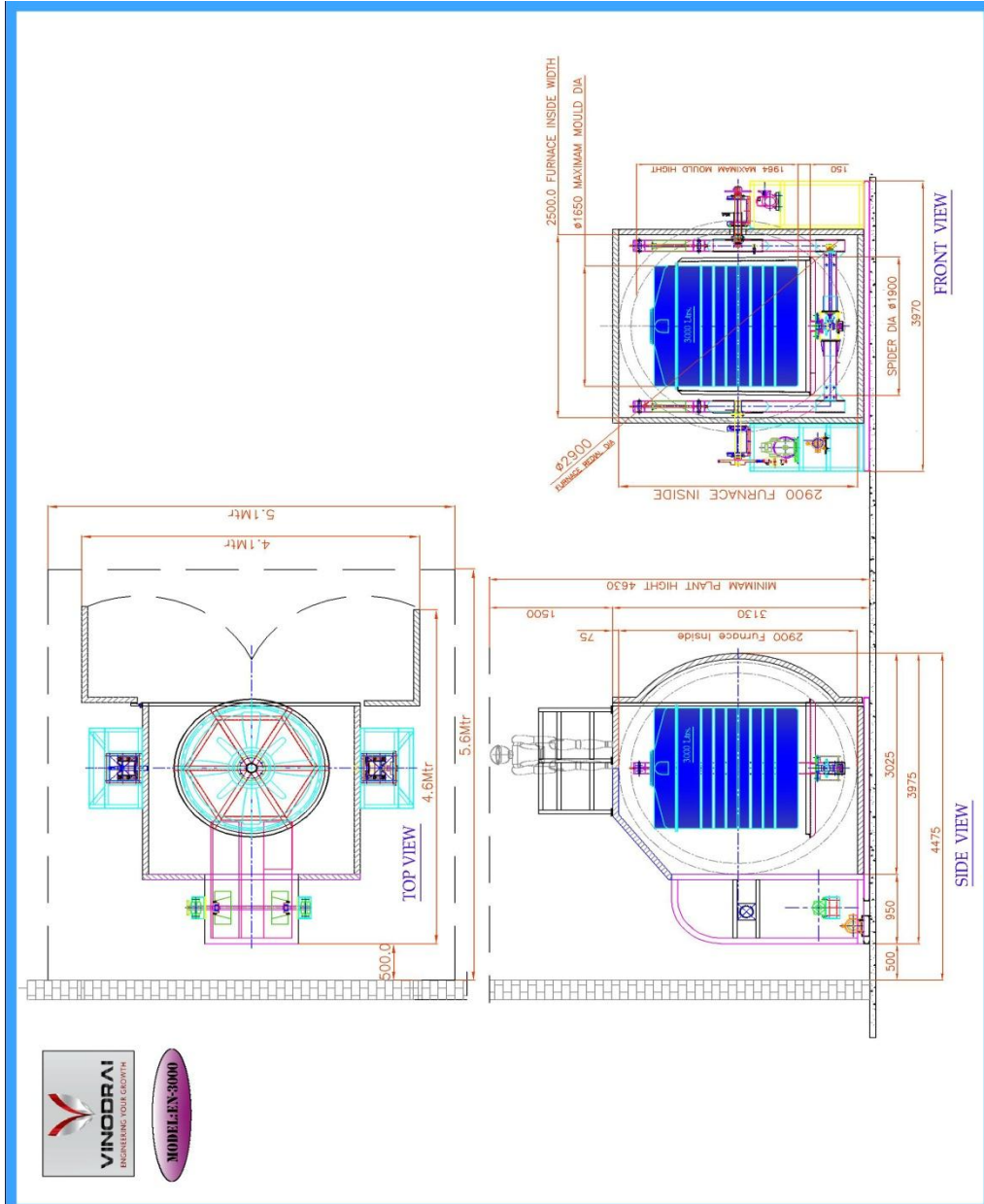
1. Plain and level ground for installation of machine.
2. Electrical connection up to panel.
3. Erection and commissioning as per agreed terms.
4. Diesel storage tank/ gas pipe line up to the burner.

Note:

Vinodrai also manufacture touch screen PLC based control panel on buyer's demand. It's a semi-automatic panel with ALEN BRADLY make PLC.

❖ Specification is subjected to improvement and development.

Vinodrai Engineers Pvt Ltd



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