

CUSTOMER FIRST!

# PRODUCT GALLERY VINODRAI ENGINEERS





# Vinodrai Engineers Pvt. Ltd.



Your Global Technology Partner in Rotational Moulding

### **About Us**

Vinodrai Engineers Pvt Ltd is preferred Technology & Engineering driven development partner in Rotational Moulding Industry globally. We have a large repository of feild know-how, design & engineering expertise, and manufacturing prowess in the region, establishing us as one the leading rotational moulding machine & moulds manufacturer in India. We have a 25+ years of experience in manufacturing a wide range of high performance, highly efficient, customized and value for money roto-moulding machines, moulds and turnkey projects.





### Machine Manufacturing Capabilities:

- We have a 13200 sqm facility on Jalna-Abad highway dedicated to machine manufacturing capable of handling 30-55 projects at a time.
- Our sophisticated manufacturing unit is equipped with latest machinery and equipment like CNC plasma cutting, bending, welding machines, hydralic press.
- We have a very good painting unit using top notch quality chemicals.

#### **Engineering Capabilities:**

- Our inspired team of engineers and technicians passionately works on continual improvements in the machine design and processing methods.
- Our design engineers are capable of using engineering desing softwares.
- · We have an in-house capability of designing PLC programs and HMI.
- Our tele-service team is available to guide our customers in troubleshooting
- We have a bank of experts in Rotational moulding materials & product design associated with us.



### Moulds

#### Moulds manufacturing Capabilities:

- We have a 9607 sqm dedicated facility for moulds manufacturing.
- We have capability of making sheet metal tank moulds (upto 50,000ltrs), customised sheet metal moulds, CNC machined moulds, Cast Aluminium machined moulds and hybrid moulds.
- We have a team of highly skilled and experienced fabricators, tool makers, CNC machine operators and CNC program designers.





#### Sheet Metal Fabrication Capabilities:

- Our sophisticated manufacturing unit is equipped with latest machinery & equipment like laser cutting, CNC cutting & bending machines.
- · We have few SPMs specifically for water tank moulds manufacturing.
- · For superior finish and negligible join line we only use TIG welding.
- · We have a specialists of buffing to give mirror polish to moulds.
- · Our inspection and quality control team working through out the process.

### **CNC Moulds manufacturing Capabilities:**

- We have 4 VMC machines imported from Vision-wide Taiwan.
- An in-house Aluminum casting facility is available complete from pattern making to pouring the casting.
- Our thoroughly trained team of operators design programs to reduce machining time so as to provide moulds at most competitive costs.
- We offer teflon coating, sandblasting and itching for mould surface finish.



# Our offerings



#### **EN-Series:**

Enterprise range Single station Bi-Axial Rotational Moulding Machines.



#### **CS-Series:**

Clamshell type Single Station Bi-Axial Rotational Moulding Machines.



#### 3-Arm:

3-Arm range of Bi-Axial Rotational Moulding Machines.



### 4-Arm:

4-Arm range of Bi-Axial Rotational Moulding Machines.

# Our offerings



### **Duroline:**

Advance Bi-Axial Rotational Moulding Machines for intricate products.



### **Pulveriser:**

Pulveriser for LLDPE raw material for Rotational Moulding.



# Fabricated Moulds:

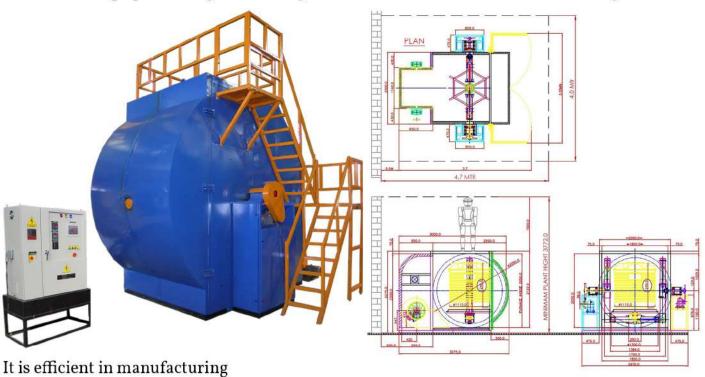
Water tank moulds and custom moulds for Rotational Moulding.



# CNC machined Moulds:

CNC machined MS and cast Aluminum moulds for Rotational Moulding.

Worlds most popular single arm single station bi-axial rotational moulding machine.



It is efficient in manufacturing I tank of 1000ltr per cycle.



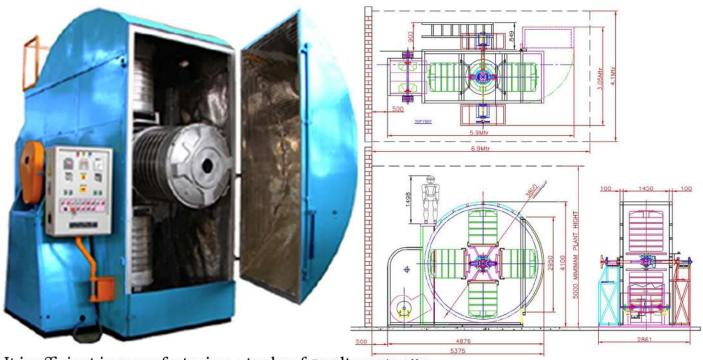
- Heavy-duty straight-arm ensuring the reliability.
- Capable of making multi-layer tanks.
- Very suitable to make good quality foam tank.
- · Suitable for all rotomoulding articles.
- Compact design thus has a small footprint.
- Only two semi-skilled persons required.
- Fuel & electricity efficient.

GENERAL SFI	ECIFICATIONS
Machine Size	Length: 3.8 mtr Width: 3.5 mtr Height: 2.5 mtr
Cycle time	Double Layer: 60 mins Triple Layer: 65 mins
Production per cycle	1000ltr x1 or 500ltr x1
Production per Day	20,000 ltrs / 24 hrs
Fuel Consumption	Diesel: 3.5ltr / hr Gas: 3.2 kg / cycle
Maximum Temperature	250°C
Total Connected Load	4.75 HP

<sup>\*-</sup> Specifications are subject to improvement

700 - 720 20 00	
Straight	Arm
Spindle	I
Maximum weight on arm	U-200 kg
Spider Diameter	1250 mm
Major Axis Speed Range	o-6 RPM
Minor Axis Speed Range	o-8 RPM
Furna	ce
Furnace Max Temperature	250°C
Burnerbox Max Temperature	300°C
Burner Capacity	95 - 240 kW
Circulating Blower CFM	7,000 CFM
Electri	cal
Supply Voltage	Std: 415V, 50 Hz, 3 Phase & Neutral (Can supply as per requirement)
Major Axis Drive AC Motor	I HP
Minor Axis Drive AC Motor	0.5 HP
Circular Blower	2 HP

Worlds most popular single arm single station bi-axial rotational moulding machine.



It is efficient in manufacturing 4 tanks of 300ltr or 500ltr or 2 tanks of 750ltr or 1000ltr per cycle.



- Heavy-duty straight-arm ensuring the reliability.
- Capable of making multi-layer tanks.
- Very suitable to make good quality foam tank.
- · Suitable for all rotomoulding articles.
- Compact design thus has a small footprint.
- Only two semi-skilled persons required.
- Fuel & electricity efficient.

Length: 6 mtr Width: 3.5 mtr Height: 4 mtr
Double Layer: 65 mins Triple Layer: 70 mins
1000ltr x2 or 500ltr x4
36,000 ltrs / 24 hrs
Diesel: 4.5ltr / hr Gas: 3.8 kg / cycle
250°C
6.5 HP

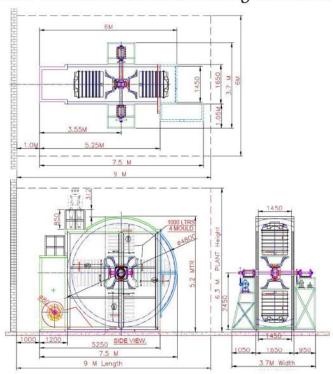
<sup>\*-</sup> Specifications are subject to improvement

TECHNICAL SPE	CIFICATIONS
Straight	Arm
Spindle	I
Maximum weight on arm	St- 500 kg
Spider Diameter	1250 mm
Major Axis Speed Range	o-6 RPM
Minor Axis Speed Range	o-8 RPM
Furna	ce
Furnace Max Temperature	250°C
Burnerbox Max Temperature	300°C
Burner Capacity	95 - 240 kW
Circulating Blower CFM	7,000 CFM
Electri	cal
Supply Voltage	Std: 415V, 50 Hz, 3 Phase & Neutral (Can supply as per requirement)
Major Axis Drive AC Motor	2 HP
Minor Axis Drive AC Motor	1 HP
Circular Blower	3 HP

Worlds most popular single arm single station bi-axial rotational moulding machine.



It is efficient in manufacturing 4 tanks of 300ltr or 500ltr or 750ltr or 1000ltr per cycle.





- Heavy-duty straight-arm ensuring the reliability.
- Capable of making multi-layer tanks.
- Very suitable to make good quality foam tank.
- Suitable for all rotomoulding articles.
- Compact design thus has a small footprint.
- Only two semi-skilled persons required.
- · Fuel & electricity efficient.

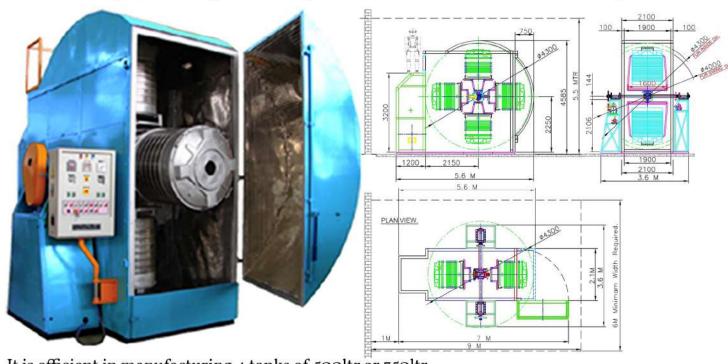
GENERAL SPECIFICATIONS	
Machine Size	Length: 7.5 mtr Width: 3.8 mtr Height: 5.2 mtr
Cycle time	Double Layer: 75 mins Triple Layer: 85 mins
Production per cycle	1000ltr x4 or 500ltr x4
Production per Day	64,000 ltrs / 24 hrs
Fuel Consumption	Diesel: 8 ltr / hr Gas: 6.75 kg / cycle
Maximum Temperature	250°C
Total Connected Load	13 HP

<sup>\*-</sup> Specifications are subject to improvement

TECHNICAL SPE	CIFICATIONS
Straight	Arm
Spindle	1
Maximum weight on arm	St- 600 kg
Spider Diameter	1250 mm
Major Axis Speed Range	o-6 RPM
Minor Axis Speed Range	o-8 RPM
Furna	ce
Furnace Max Temperature	250°C
Burnerbox Max Temperature	300°C
Burner Capacity	95 - 240 kW
Circulating Blower CFM	7,000 CFM
Electri	cal
Supply Voltage	Std: 415V, 50 Hz, 3 Phase & Neutral (Can supply as per requirement)
Major Axis Drive AC Motor	3 HP
Minor Axis Drive AC Motor	2 HP
Circular Blower	7.5 HP

# EN-1500x2

Worlds most popular single arm single station bi-axial rotational moulding machine.



It is efficient in manufacturing 4 tanks of 500ltr or 750ltr or 2 tanks of 1000ltr or 1500ltr per cycle.

### EN-1500x2



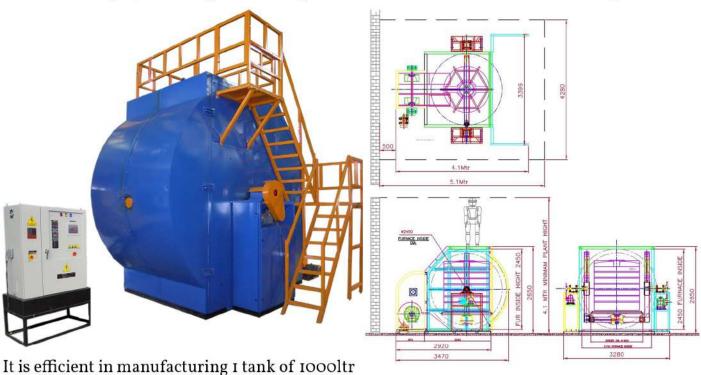
- Heavy-duty straight-arm ensuring the reliability.
- Capable of making multi-layer tanks.
- Very suitable to make good quality foam tank.
- · Suitable for all rotomoulding articles.
- Compact design thus has a small footprint.
- Only two semi-skilled persons required.
- Fuel & electricity efficient.

GENERAL SPECIFICATIONS	
Length: 7 mtr Width: 3.6 mtr Height: 4.7 mtr	
Double Layer: 80 mins Triple Layer: 90 mins	
1500ltr x2 or 750ltr x4	
54,000 ltrs / 24 hrs	
Diesel: 6.5 ltr / hr Gas: 5.4 kg / cycle	
250°C	
13 HP	

<sup>\*-</sup> Specifications are subject to improvement

TECHNICAL SPE	
Straight	Arm
Spindle	I
Maximum weight on arm	St- 600 kg
Spider Diameter	1650 mm
Major Axis Speed Range	o-6 RPM
Minor Axis Speed Range	o-8 RPM
Furna	ce
Furnace Max Temperature	250°C
Burnerbox Max Temperature	300°C
Burner Capacity	95 - 240 kW
Circulating Blower CFM	7,000 CFM
Electri	cal
Supply Voltage	Std: 415V, 50 Hz, 3 Phase & Neutral (Can supply as per requirement)
Major Axis Drive AC Motor	3 HP
Minor Axis Drive AC Motor	2 HP
Circular Blower	7.5 HP

Worlds most popular single arm single station bi-axial rotational moulding machine.



It is efficient in manufacturing I tank of 1000ltr or I tank of 2000ltr per cycle.



- Heavy-duty straight-arm ensuring the reliability.
- Capable of making multi-layer tanks.
- Very suitable to make good quality foam tank.
- · Suitable for all rotomoulding articles.
- Compact design thus has a small footprint.
- Only two semi-skilled persons required.
- Fuel & electricity efficient.

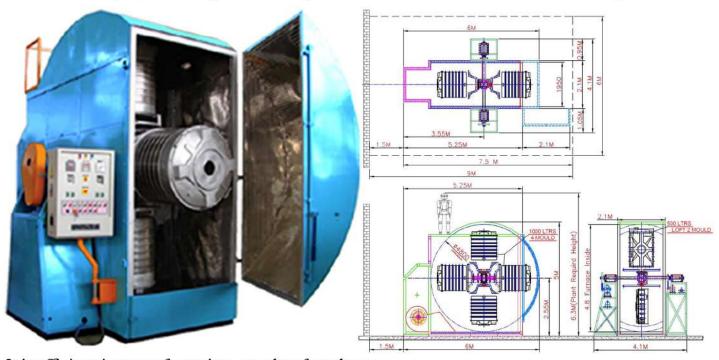
	Length: 4.2 mtr
Machine Size	Width: 3.5 mtr
	Height: 2.7 mtr
Cycle time	Double Layer: 65 mins
	Triple Layer: 70 mins
Production per cycle	2000ltr xI or I500ltr xI
Production per Day	40,000 ltrs / 24 hrs
Fuel Consumption	Diesel: 5.5 ltr/hr
	Gas: 4.2 kg / cycle
Maximum Temperature	250°C
Total Connected Load	10.5 HP

<sup>\*-</sup> Specifications are subject to improvement

TECHNICAL SPE	CIFICATIONS
Straight	Arm
Spindle	I
Maximum weight on arm	U- 700 kg
Spider Diameter	1650 mm
Major Axis Speed Range	o-6 RPM
Minor Axis Speed Range	o-8 RPM
Furna	ce
Furnace Max Temperature	250°C
Burnerbox Max Temperature	300°C
Burner Capacity	95 - 240 kW
Circulating Blower CFM	7,000 CFM
Electri	cal
Supply Voltage	Std: 415V, 50 Hz, 3 Phase & Neutral (Can supply as per requirement)
Major Axis Drive AC Motor	3 HP
Minor Axis Drive AC Motor	2 HP
Circular Blower	5 HP

### EN-2000x2

Worlds most popular single arm single station bi-axial rotational moulding machine.



It is efficient in manufacturing 4 tanks of 750ltr or 1000ltr per cycle or 2 tanks of 1500ltr or 2000ltr per cycle.

### EN-2000x2



- Heavy-duty straight-arm ensuring the reliability.
- Capable of making multi-layer tanks.
- Very suitable to make good quality foam tank.
- · Suitable for all rotomoulding articles.
- Compact design thus has a small footprint.
- Only two semi-skilled persons required.
- Fuel & electricity efficient.

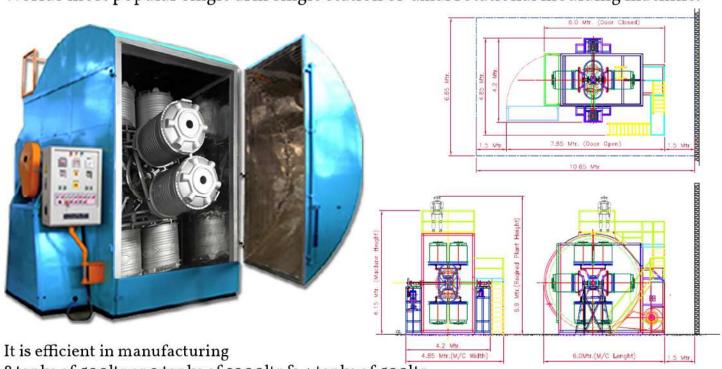
GENERAL SPECIFICATIONS	
Machine Size	Length: 7.5 mtr Width: 4.5 mtr Height: 5 mtr
Cycle time	Double Layer: 80 mins Triple Layer: 90 mins
Production per cycle	2000ltr x2 or 1000ltr x4
Production per Day	64,000 ltrs / 24 hrs
Fuel Consumption	Diesel: 10 ltr / hr Gas: 8.5 kg / cycle
Maximum Temperature	250°C
Total Connected Load	13 HP

<sup>\*-</sup> Specifications are subject to improvement

TECHNICAL SPE	CIFICATIONS
Straight	Arm
Spindle	I
Maximum weight on arm	St- 600 kg
Spider Diameter	1650 mm
Major Axis Speed Range	o-6 RPM
Minor Axis Speed Range	o-8 RPM
Furna	ice
Furnace Max Temperature	250°C
Burnerbox Max Temperature	300°C
Burner Capacity	95 - 240 kW
Circulating Blower CFM	10,720 CFM
Electri	cal
Supply Voltage	Std: 415V, 50 Hz, 3 Phase & Neutral (Can supply as per requirement)
Major Axis Drive AC Motor	3 HP
Minor Axis Drive AC Motor	2 HP
Circular Blower	7.5 HP

### EN-2000x2 SP

Worlds most popular single arm single station bi-axial rotational moulding machine.



8 tanks of 500ltr or 2 tanks of 1000ltr & 4 tanks of 500ltr

4 tanks of 750ltr or 1000ltr or 2 tanks of 1500ltr or 2000ltr per cycle.

### EN-2000x2 SP



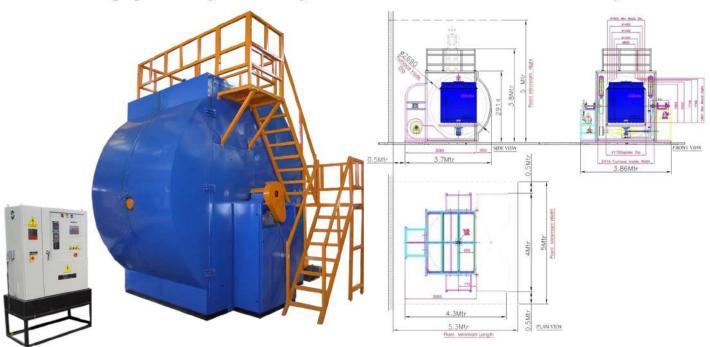
- Heavy-duty straight-arm ensuring the reliability.
- Capable of making multi-layer tanks.
- Very suitable to make good quality foam tank.
- · Suitable for all rotomoulding articles.
- Compact design thus has a small footprint.
- Only two semi-skilled persons required.
- Fuel & electricity efficient.

	Length: 7.9 mtr
Machine Size	Width: 4.9 mtr
	Height: 6.2mtr
Cycle time	Double Layer: 80 mins
	Triple Layer: 90 mins
Production per cycle	2000ltr x2 or 1000ltr x4
Production per Day	64,000 ltrs / 24 hrs
P 10 "	Diesel: 12 ltr / hr
Fuel Consumption	Gas: 10.2 kg / cycle
Maximum Temperature	250°C
Total Connected Load	13 HP

<sup>\*-</sup> Specifications are subject to improvement

TECHNICAL SPE	CIFICATIONS
Straight	-Arm
Spindle	I
Maximum weight on arm	St- 850 kg
Spider Diameter	1650 mm
Major Axis Speed Range	o-6 RPM
Minor Axis Speed Range	o-8 RPM
Furna	ce
Furnace Max Temperature	250°C
Burnerbox Max Temperature	300°C
Burner Capacity	95 - 240 kW
Circulating Blower CFM	10,720 CFM
Electri	cal
Supply Voltage	Std: 415V, 50 Hz, 3 Phase & Neutral (Can supply as per requirement)
Major Axis Drive AC Motor	3 HP
Minor Axis Drive AC Motor	2 HP
Circular Blower	7.5 HP

Worlds most popular single arm single station bi-axial rotational moulding machine.



It is efficient in manufacturing I tank of 2000ltr or I tank of 2500ltr per cycle.



- Heavy-duty straight-arm ensuring the reliability.
- Capable of making multi-layer tanks.
- Very suitable to make good quality foam tank.
- · Suitable for all rotomoulding articles.
- Compact design thus has a small footprint.
- Only two semi-skilled persons required.
- Fuel & electricity efficient.

GENERAL SPECIFICATIONS	
Machine Size	Length: 4.5 mtr Width: 4.5 mtr Height: 3.8 mtr
Cycle time	Double Layer: 70 mins Triple Layer: 80 mins
Production per cycle	2500ltr xI or 2000ltr xI
Production per Day	45,000 ltrs / 24 hrs
Fuel Consumption	Diesel: 6.5 ltr / hr Gas: 5.5 kg / cycle
Maximum Temperature	250°C
Total Connected Load	13 HP

<sup>\*-</sup> Specifications are subject to improvement

TECHNICAL SPE	CIFICATIONS
Straight	-Arm
Spindle	1
Maximum weight on arm	U- 500 kg
Spider Diameter	1700 mm
Major Axis Speed Range	o-4 RPM
Minor Axis Speed Range	o-6 RPM
Furna	ce
Furnace Max Temperature	250°C
Burnerbox Max Temperature	300°C
Burner Capacity	95 - 240 kW
Circulating Blower CFM	7,000 CFM
Electri	cal
Supply Voltage	Std: 440V, 50 Hz, 3 Phase & Neutral (Can supply as per requirement)
Major Axis Drive AC Motor	3 HP
Minor Axis Drive AC Motor	2 HP
Circular Blower	7.5 HP

Worlds most popular single arm single station bi-axial rotational moulding machine.



It is efficient in manufacturing I tank of 2000ltr or I tank of 3000ltr per cycle.



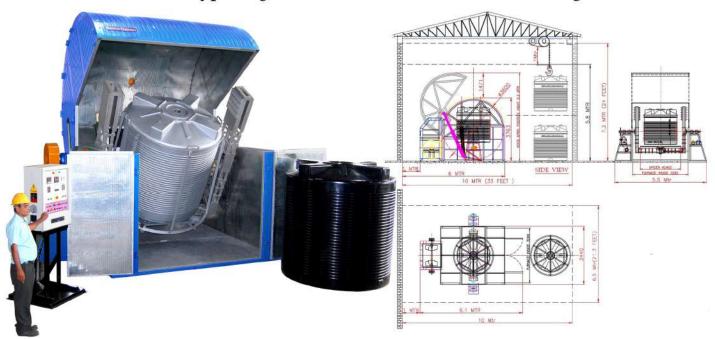
- Heavy-duty straight-arm ensuring the reliability.
- Capable of making multi-layer tanks.
- Very suitable to make good quality foam tank.
- · Suitable for all rotomoulding articles.
- Compact design thus has a small footprint.
- Only two semi-skilled persons required.
- Fuel & electricity efficient.

Machine Size	Length: 4.5 mtr Width: 5 mtr
Wiachine of Ze	Height: 4 mtr
Cycle time	Double Layer: 80 mins Triple Layer: 90 mins
Production per cycle	3000ltr x1 or 2000ltr x1
Production per Day	48,000 ltrs / 24 hrs
Fuel Consumption	Diesel: 8 ltr / hr Gas: 6.8 kg / cycle
Maximum Temperature	250°C
Total Connected Load	13 HP

<sup>\*-</sup> Specifications are subject to improvement

Straight	Arm
Spindle	I
Maximum weight on arm	U- 500 kg
Spider Diameter	1900 mm
Major Axis Speed Range	o-6 RPM
Minor Axis Speed Range	o-8 RPM
Furna	ce
Furnace Max Temperature	250°C
Burnerbox Max Temperature	300°C
Burner Capacity	95 - 240 kW
Circulating Blower CFM	7,500 CFM
Electri	cal
Supply Voltage	Std: 415V, 50 Hz, 3 Phase & Neutral (Can supply as per requirement)
Major Axis Drive AC Motor	3 HP
Minor Axis Drive AC Motor	2 HP
Circular Blower	7.5 HP

State of Art Clamshell type single station bi-axial rotational moulding machine.



It is efficient in manufacturing I tank of 3000ltr or I tank of 5000ltr per cycle.



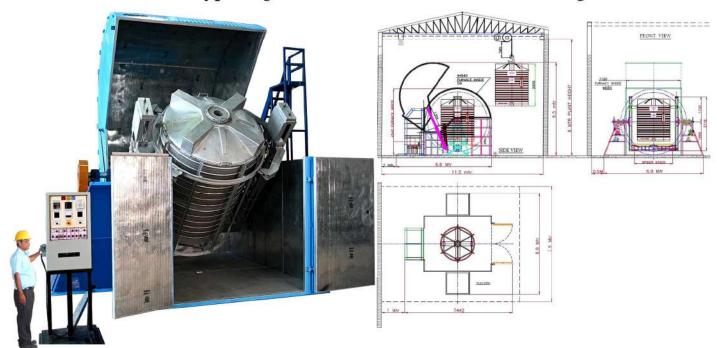
- · Highy productive & fuel efficient
- Capable of making multi-layer foam tanks.
- Eco-friendly closed oven forced air circulation
- Automatic Vertical alignment mechanism
- Compact design thus has a small footprint.
- Only two semi-skilled persons required.
- High on safety with hydraulic hood lifting system.

GENERAL SPECIFICATIONS	
Machine Size	Length: 6.1 mtr Width: 5.5 mtr Height: 5.8 mtr
Cycle time	Double Layer: 90 mins Triple Layer: 120 mins
Production per cycle	5000ltr xI or 3000ltr xI
Production per Day	80,000 ltrs / 24 hrs
Fuel Consumption	Diesel: 11 ltr / hr Gas: 9.3 kg / cycle
Maximum Temperature	250°C
Total Connected Load	16 HP

<sup>\*-</sup> Specifications are subject to improvement

TECHNICAL SPE	CIFICATIONS
Straight	Arm
Spindle	I
Maximum weight on arm	U- 800 kg
Spider Diameter	2400 mm
Major Axis Speed Range	o-4 RPM
Minor Axis Speed Range	o-6 RPM
Furna	ce
Furnace Max Temperature	250°C
Burnerbox Max Temperature	300°C
Burner Capacity	95 - 240 kW
Circulating Blower CFM	11,500 CFM
Electri	cal
Supply Voltage	Std: 415 V, 50 Hz, 3 Phase & Neutral (Can supply as per requirement)
Major Axis Drive AC Motor	3 HP
Minor Axis Drive AC Motor	2 HP
Circular Blower	5 HP

State of Art Clamshell type single station bi-axial rotational moulding machine.



It is efficient in manufacturing I tank of 75000ltr or I tank of 10,000ltr per cycle.



- · Highy productive & fuel efficient
- Capable of making multi-layer foam tanks.
- Eco-friendly closed oven forced air circulation
- Automatic Vertical alignment mechanism
- Compact design thus has a small footprint.
- · Only two semi-skilled persons required.
- · High on safety with hydraulic hood lifting system.

GENERAL SPECIFICATIONS	
Machine Size	Length: 8 mtr Width: 7 mtr Height: 6.5 mtr
Cycle time	Double Layer: 120 mins Triple Layer: 140 mins
Production per cycle	10000ltr x1 or 7500ltr x1
Production per Day	120,000 ltrs / 24 hrs
Fuel Consumption	Diesel: 30 ltr / hr Gas: 25.5 kg / cycle
Maximum Temperature	250°C
Total Connected Load	24 HP

<sup>\*-</sup> Specifications are subject to improvement

TECHNICAL SPECIFICATIONS	
Straight	Arm
Spindle	I
Maximum weight on arm	U- 1000 kg
Spider Diameter	2600 mm
Major Axis Speed Range	o-4 RPM
Minor Axis Speed Range	o-6 RPM
Furna	ce
Furnace Max Temperature	250°C
Burnerbox Max Temperature	300°C
Burner Capacity	130 to 1050 kW
Circulating Blower CFM	20,600 CFM
Electri	cal
Supply Voltage	Std: 415 V, 50 Hz, 3 Phase & Neutral (Can supply as per requirement)
Major Axis Drive AC Motor	5 HP
Minor Axis Drive AC Motor	3 HP
Circular Blower	10 НР

State of Art Clamshell type single station bi-axial rotational moulding machine.



It is efficient in manufacturing I tank of 1000oltr or I tank of 2000oltr per cycle.



- · Highy productive & fuel efficient
- Capable of making multi-layer foam tanks.
- Eco-friendly closed oven forced air circulation
- Automatic Vertical alignment mechanism
- Compact design thus has a small footprint.
- · Only two semi-skilled persons required.
- · High on safety with hydraulic hood lifting system.

GENERAL SPECIFICATIONS	
Machine Size	Length: 12 mtr Width: 7.2 mtr Height: 7.6 mtr
Cycle time	Double Layer: 180 mins Triple Layer: 200 mins
Production per cycle	20000ltr xI or 10000ltr x
Production per Day	160,000 ltrs / 24 hrs
Fuel Consumption	Diesel: 35 ltr / cycle Gas: 26.6 kg / cycle
Maximum Temperature	250°C
Total Connected Load	26.5 HP

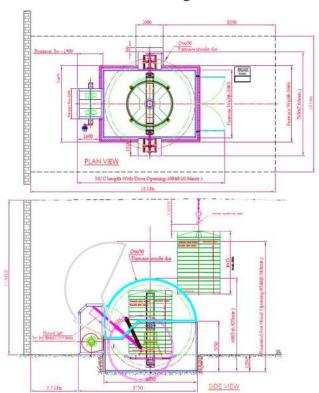
<sup>\*-</sup> Specifications are subject to improvement

Straight	Arm
Spindle	1
Maximum weight on arm	U- 1700 kg
Spider Diameter	3400 mm
Major Axis Speed Range	o-4 RPM
Minor Axis Speed Range	o-6 RPM
Furna	ce
Furnace Max Temperature	250°C
Burnerbox Max Temperature	300°C
Burner Capacity	154 to 2700 kW
Circulating Blower CFM	42,300 CFM
Electri	cal
Supply Voltage	Std: 415 V, 50 Hz, 3 Phase & Neutral (Can supply as per requirement)
Major Axis Drive AC Motor	7.5 HP
Minor Axis Drive AC Motor	3 HP
Circular Blower	10 НР

State of Art Clamshell type single station bi-axial rotational moulding machine.



It is efficient in manufacturing I tank of 20,000ltr or I tank of 30,000ltr per cycle.





- · Highy productive & fuel efficient
- Capable of making multi-layer foam tanks.
- Eco-friendly closed oven forced air circulation
- Automatic Vertical alignment mechanism
- Compact design thus has a small footprint.
- · Only two semi-skilled persons required.
- High on safety with hydraulic hood lifting system.

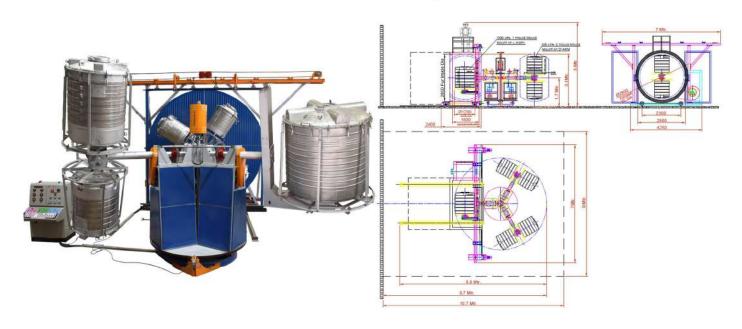
GENERAL SPECIFICATIONS	
Machine Size	Length: 18 mtr Width: 9.5 mtr Height: 10.5 mtr
Cycle time	Double Layer: 240 mins Triple Layer: 270 mins
Production per cycle	30000ltr xI or 20000ltr x
Production per Day	180,000 ltrs / 24 hrs
Fuel Consumption	Diesel: 45 ltr / cycle Gas: 38 kg / cycle
Maximum Temperature	250°C
Total Connected Load	26.5 HP

<sup>\*-</sup> Specifications are subject to improvement

Straight-Arm		
Spindle	I	
Maximum weight on arm	U- 2500 kg	
Spider Diameter	3800 mm	
Major Axis Speed Range	o-4 RPM	
Minor Axis Speed Range	o-6 RPM	
Furna	ce	
Furnace Max Temperature	250°C	
Burnerbox Max Temperature	300°C	
Burner Capacity	154 to 2700 kW	
Circulating Blower CFM	49,000 CFM	
Electri	cal	
Supply Voltage	Std: 415 V, 50 Hz, 3 Phase & Neutral (Can supply as per requirement)	
Major Axis Drive AC Motor	7.5 HP	
Minor Axis Drive AC Motor	3 HP	
Circular Blower	10 НР	

# VI-3-1000

State of Art three arm bi-axial rotational moulding machine.



It is efficient in manufacturing 2 tanks of 300ltr or 500ltr or 1 tank of 750ltr or 1000ltr per cycle.

# VI-3-1000

- Heavy-duty machine ensuring the reliability.
- Capable of making multi-layer foam tanks.
- · Maintenance free long operations.
- · Only three semi-skilled persons required.
- Fuel & electricity efficient.
- · Suitable for all rotomoulding articles.
- Optional PLC touch screen HMI available

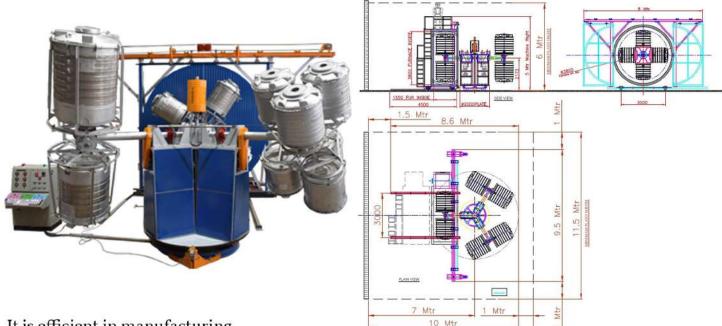
GENERAL SPECIFICATIONS		
Machine Size	Length: 10.7 mtr Width: 9.5 mtr Height: 5 mtr	
Cycle time	Double Layer: 25 mins Triple Layer: 30 mins	
Production per cycle	1000ltr x1 or 500ltr x2	
Production per Day	72,000 ltrs / 24 hrs	
Fuel Consumption	Diesel: 10ltr / hr Gas: 8.5 kg / cycle	
Maximum Temperature	250°C	
Total Connected Load	19.5 HP	

<sup>\*-</sup> Specifications are subject to improvement

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Straight	Arm
Spindle	3
Maximum weight on arm	St-400 kg   L-250 kg
Spider Diameter	1200 mm
Major Axis Speed Range	o-6 RPM
Minor Axis Speed Range	o-8 RPM
Furna	ce
Furnace Max Temperature	250°C
Burnerbox Max Temperature	300°C
Burner Capacity	95 - 240 kW
Circulating Blower CFM	12,000 CFM
Electri	cal
Supply Voltage	Std: 440V, 50 Hz, 3 Phase & Neutral (Can supply as per requirement)
Major Axis Drive AC Motor	2 HP
Minor Axis Drive AC Motor	1 HP
Circular Blower	5 HP

# VI-3-1000x2

State of Art three arm bi-axial rotational moulding machine.



11Mtr

It is efficient in manufacturing 4 tanks of 300ltr or 500ltr or 2 tanks of 750ltr or 1000ltr per cycle.

## VI-3-1000x2

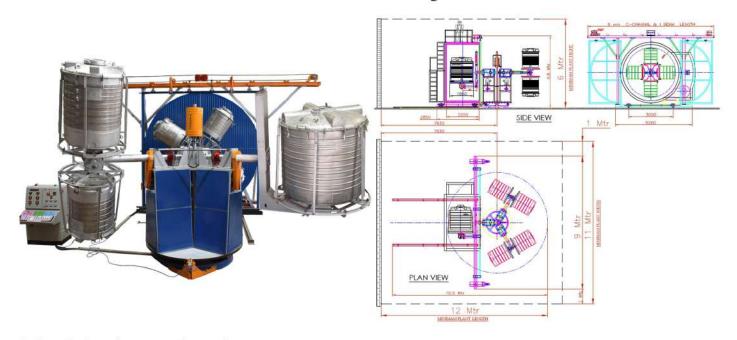
- Heavy-duty machine ensuring the reliability.
- Capable of making multi-layer foam tanks.
- · Maintenance free long operations.
- · Only three semi-skilled persons required.
- Fuel & electricity efficient.
- · Suitable for all rotomoulding articles.
- Optional PLC touch screen HMI available

GENERAL SPECIFICATIONS	
Length: 8.6 mtr Width: 9.5 mtr Height: 5 mtr	
Double Layer: 25 mins Triple Layer: 30 mins	
1000ltr x2 or 500ltr x4	
96,000 ltrs / 24 hrs	
Diesel: 14ltr / hr Gas: 11.9 kg / cycle	
250°C	
26.5 HP	

<sup>\*-</sup> Specifications are subject to improvement

TECHNICAL SPECIFICATIONS  Straight-Arm	
Maximum weight on arm	St- 500 kg
Spider Diameter	1250 mm
Major Axis Speed Range	o-6 RPM
Minor Axis Speed Range	o-8 RPM
Furna	ce
Furnace Max Temperature	250°C
Burnerbox Max Temperature	300°C
Burner Capacity	95 - 240 kW
Circulating Blower CFM	12,000 CFM
Electri	cal
Supply Voltage	Std: 440V, 50 Hz, 3 Phase & Neutral (Can supply as per requirement)
Major Axis Drive AC Motor	2 HP
Minor Axis Drive AC Motor	1 HP
Circular Blower	5 HP

State of Art three arm bi-axial rotational moulding machine.



It is efficient in manufacturing 2 tanks of 1000ltr or 4 tanks of 500ltr or 1 tank of 2000ltr per cycle.

- Heavy-duty machine ensuring the reliability.
- Capable of making multi-layer foam tanks.
- · Maintenance free long operations.
- Only three semi-skilled persons required.
- Fuel & electricity efficient.
- · Suitable for all rotomoulding articles.
- Optional PLC touch screen HMI available

GENERAL SPECIFICATIONS	
Machine Size	Length: 10 mtr Width: 9 mtr Height: 5 mtr
Cycle time	Double Layer: 25 mins Triple Layer: 30 mins
Production per cycle	2000ltr xI or I000ltr x2
Production per Day	96,000 ltrs / 24 hrs
Fuel Consumption	Diesel: 14ltr / hr Gas: 11.9 kg / cycle
Maximum Temperature	250°C
Total Connected Load	29.5 HP

<sup>\*-</sup> Specifications are subject to improvement

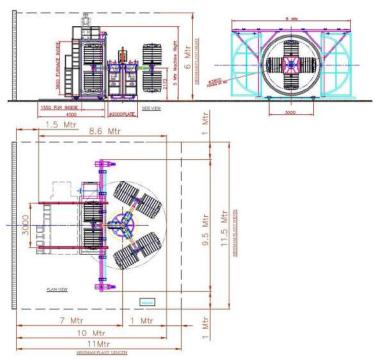
TECHNICAL SPECIFICATIONS  Straight-Arm	
Maximum weight on arm	St- 500 kg   L- 250 kg
Spider Diameter	1200 mm
Major Axis Speed Range	o-6 RPM
Minor Axis Speed Range	o-8 RPM
Furna	ce
Furnace Max Temperature	250°C
Burnerbox Max Temperature	300°C
Burner Capacity	95 - 240 kW
Circulating Blower CFM	18,000 CFM
Electri	cal
Supply Voltage	Std: 440V, 50 Hz, 3 Phase & Neutral (Can supply as per requirement)
Major Axis Drive AC Motor	3 HP
Minor Axis Drive AC Motor	2 HP
Circular Blower	7.5 HP

## VI-3-2000x2

State of Art three arm bi-axial rotational moulding machine.



It is efficient in manufacturing 6 tanks of 300ltr or 500ltr or 4 tanks of 750ltr or 1000ltr per cycle or 2 tanks of 1500ltr or 2000ltr per cycle.



# VI-3-2000x2



- Heavy-duty machine ensuring the reliability.
- · Capable of making multi-layer foam tanks.
- · Maintenance free long operations.
- · Only three semi-skilled persons required.
- Fuel & electricity efficient.
- · Suitable for all rotomoulding articles.
- Optional PLC touch screen HMI available

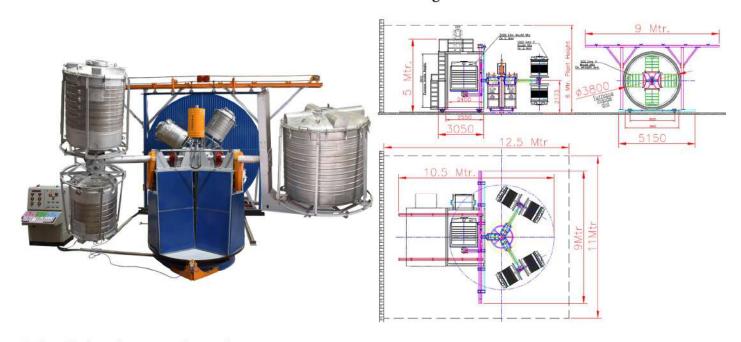
GENERAL SPECIFICATIONS	
Machine Size	Length: 10.7 mtr Width: 10 mtr Height: 6 mtr
Cycle time	Double Layer: 30 mins Triple Layer: 35 mins
Production per cycle	2000ltr x 2 or 500ltr x 6
Production per Day	160,000 ltrs / 24 hrs
Fuel Consumption	Diesel: 18 ltr / hr Gas: 16 kg / cycle
Maximum Temperature	250°C
Total Connected Load	40 HP

<sup>\*-</sup> Specifications are subject to improvement



TECHNICAL SPE	CIFICATIONS
Straight	Arm
Spindle	3
Maximum weight on arm	St- 600 kg
Spider Diameter	1650 mm
Major Axis Speed Range	o-6 RPM
Minor Axis Speed Range	o-8 RPM
Furna	ce
Furnace Max Temperature	250°C
Burnerbox Max Temperature	300°C
Burner Capacity	95 - 240 kW
Circulating Blower CFM	18,000 CFM
Electri	cal
Supply Voltage	Std: 440V, 50 Hz, 3 Phase & Neutral (Can supply as per requirement)
Major Axis Drive AC Motor	3 HP
Minor Axis Drive AC Motor	2 HP
Circular Blower	7.5 HP

State of Art three arm bi-axial rotational moulding machine.



It is efficient in manufacturing 2 tanks of 1000ltr or 4 tanks of 500ltr or 1 tank of 3000ltr per cycle.

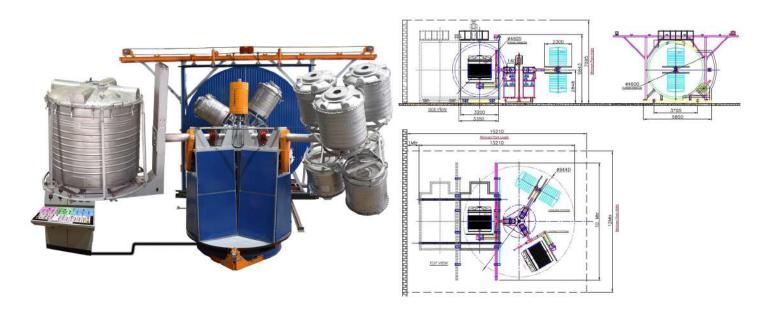
- Heavy-duty machine ensuring the reliability.
- Capable of making multi-layer foam tanks.
- · Maintenance free long operations.
- · Only three semi-skilled persons required.
- Fuel & electricity efficient.
- · Suitable for all rotomoulding articles.
- Optional PLC touch screen HMI available

GENERAL SPECIFICATIONS	
Length: 12.5 mtr Width: 9 mtr Height: 5 mtr	
Double Layer: 30 mins Triple Layer: 35 mins	
3000ltr xI or I000ltr x2	
96,000 ltrs / 24 hrs	
Diesel: 14ltr / hr Gas: 11.9 kg / cycle	
250°C	
29.5 HP	

<sup>\*-</sup> Specifications are subject to improvement

0, 11,	W. Committee of the Com
Straight	Arm
Spindle	3
Maximum weight on arm	St- 500 kg   L- 300 kg
Spider Diameter	1600 mm
Major Axis Speed Range	o-6 RPM
Minor Axis Speed Range	o-8 RPM
Furna	ce
Furnace Max Temperature	250°C
Burnerbox Max Temperature	300°C
Burner Capacity	95 - 240 kW
Circulating Blower CFM	18,000 CFM
Electri	cal
Supply Voltage	Std: 440V, 50 Hz, 3 Phase & Neutral (Can supply as per requirement)
Major Axis Drive AC Motor	3 HP
Minor Axis Drive AC Motor	2 HP
Circular Blower	7.5 HP

State of Art three arm bi-axial rotational moulding machine.



It is efficient in manufacturing 2 tanks of 2000ltr or 6 tanks of 500ltr or 1 tank of 5000ltr per cycle.

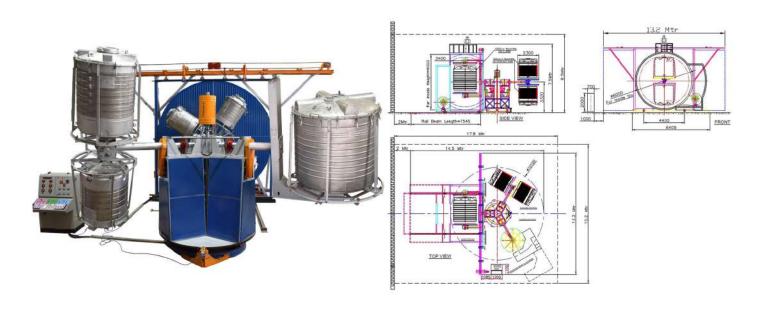
- Heavy-duty machine ensuring the reliability.
- Capable of making multi-layer foam tanks.
- · Maintenance free long operations.
- · Only three semi-skilled persons required.
- Fuel & electricity efficient.
- · Suitable for all rotomoulding articles.
- Optional PLC touch screen HMI available

GENERAL SPECIFICATIONS	
Machine Size	Length: 13.2 mtr Width: 10 mtr Height: 6 mtr
Cycle time	Double Layer: 45 mins Triple Layer: 50 mins
Production per cycle	5000ltr x1 or 2000ltr x2
Production per Day	140,000 ltrs / 24 hrs
Fuel Consumption	Diesel: 28ltr / hr Gas: 24 kg / cycle
Maximum Temperature	250°C
Total Connected Load	40 HP

<sup>\*-</sup> Specifications are subject to improvement

TECHNICAL SPE	CIFICATIONS
Straight	-Arm
Spindle	3
Maximum weight on arm	St- 700 kg   L- 550 kg
Spider Diameter	2400 mm
Major Axis Speed Range	o-4 RPM
Minor Axis Speed Range	o-6 RPM
Furna	ce
Furnace Max Temperature	250°C
Burnerbox Max Temperature	300°C
Burner Capacity	95 - 240 kW
Circulating Blower CFM	24,000 CFM
Electri	cal
Supply Voltage	Std: 440V, 50 Hz, 3 Phase & Neutral (Can supply as per requirement)
Major Axis Drive AC Motor	5 HP
Minor Axis Drive AC Motor	3 HP
Circular Blower	10 НР

State of Art three arm bi-axial rotational moulding machine.



It is efficient in manufacturing 2 tanks of 5000ltr or 4 tanks of 2000ltr or 1 tank of 10,000ltr per cycle.



- Heavy-duty machine ensuring the reliability.
- · Capable of making multi-layer foam tanks.
- · Maintenance free long operations.
- · Only three semi-skilled persons required.
- Fuel & electricity efficient.
- · Suitable for all rotomoulding articles.
- Optional PLC touch screen HMI available

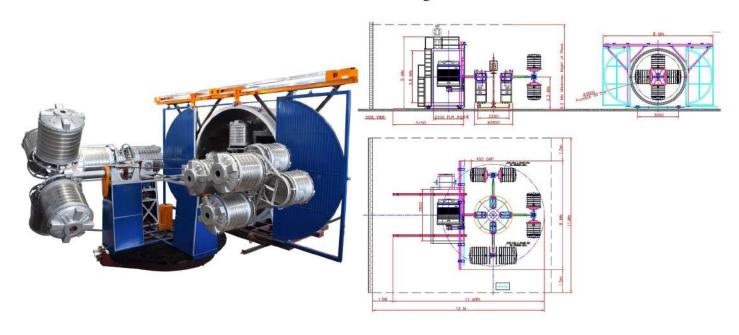
GENERAL SPECIFICATIONS	
Machine Size	Length: 16.5 mtr Width: 12 mtr Height: 7.2 mtr
Cycle time	Double Layer: 60 mins Triple Layer: 65 mins
Production per cycle	10000ltr x1 or 5000ltr x2
Production per Day	240,000 ltrs / 24 hrs
Fuel Consumption	Diesel: 32ltr / hr Gas: 27 kg / cycle
Maximum Temperature	250°C
Total Connected Load	54 HP

<sup>\*-</sup> Specifications are subject to improvement



TECHNICAL SPE	CIFICATIONS
Straight	Arm
Spindle	3
Maximum weight on arm	St- 1000 kg   L- 950 kg
Spider Diameter	2800 mm
Major Axis Speed Range	o-4 RPM
Minor Axis Speed Range	o-6 RPM
Furna	ce
Furnace Max Temperature	250°C
Burnerbox Max Temperature	300°C
Burner Capacity	130 to 1050 kW
Circulating Blower CFM	24,000 CFM
Electri	cal
Supply Voltage	Std: 440V, 50 Hz, 3 Phase & Neutral (Can supply as per requirement)
Major Axis Drive AC Motor	5 HP
Minor Axis Drive AC Motor	3 HP
Circular Blower	10 НР

State of Art four arm bi-axial rotational moulding machine.



It is efficient in manufacturing 2 tanks of 300ltr or 500ltr or 1 tank of 750ltr or 1000ltr per cycle.

- Heavy-duty machine ensuring the reliability.
- Capable of making multi-layer foam tanks.
- · Maintenance free long operations.
- · Only three semi-skilled persons required.
- Fuel & electricity efficient.
- · Suitable for all rotomoulding articles.
- Optional PLC touch screen HMI available

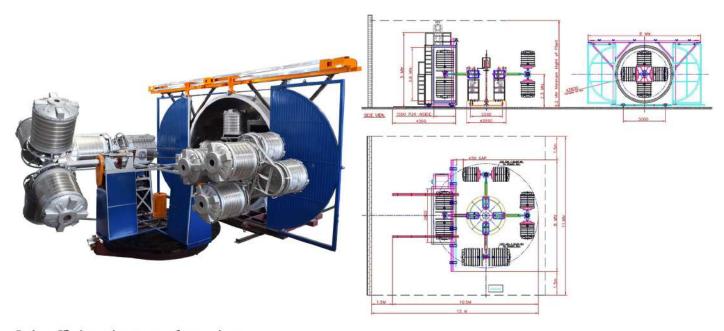
GENERAL SPECIFICATIONS	
Length: 11 mtr Width: 8 mtr Height: 5.5 mtr	
Double Layer: 25 mins Triple Layer: 30 mins	
1000ltr x1 or 500ltr x2	
48,000 ltrs / 24 hrs	
Diesel: 10ltr / hr Gas: 8.5 kg / cycle	
250°C	
22.5 HP	

<sup>\*-</sup> Specifications are subject to improvement

TECHNICAL SPE	CIFICATIONS
Straight	-Arm
Spindle	4
Maximum weight on arm	St-400 kg   L-250 kg
Spider Diameter	1200 mm
Major Axis Speed Range	o-6 RPM
Minor Axis Speed Range	o-8 RPM
Furna	ce
Furnace Max Temperature	250°C
Burnerbox Max Temperature	300°C
Burner Capacity	95 - 240 kW
Circulating Blower CFM	12,000 CFM
Electri	cal
Supply Voltage	Std: 440V, 50 Hz, 3 Phase & Neutral (Can supply as per requirement)
Major Axis Drive AC Motor	2 HP
Minor Axis Drive AC Motor	1 HP
Circular Blower	5 HP

# VI-4-1000x2

State of Art four arm bi-axial rotational moulding machine.



It is efficient in manufacturing 4 tanks of 300ltr or 500ltr or 2 tanks of 750ltr or 1000ltr per cycle.

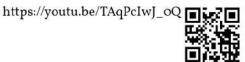
## VI-4-1000x2



- Heavy-duty machine ensuring the reliability.
- · Capable of making multi-layer foam tanks.
- · Maintenance free long operations.
- · Only three semi-skilled persons required.
- Fuel & electricity efficient.
- · Suitable for all rotomoulding articles.
- Optional PLC touch screen HMI available

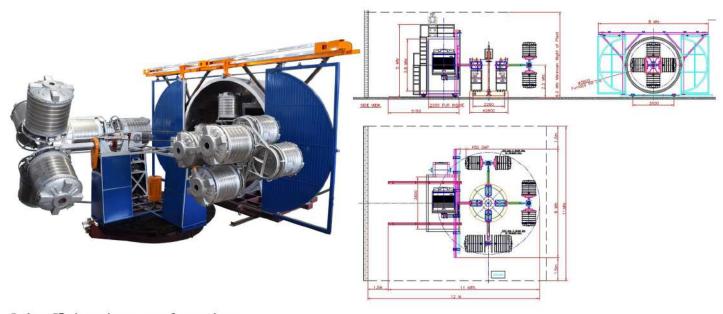
GENERAL SPECIFICATIONS	
Machine Size	Length: 10.5 mtr Width: 8 mtr Height: 6 mtr
Cycle time	Double Layer: 25 mins Triple Layer: 30 mins
Production per cycle	1000ltr x2 or 500ltr x4
Production per Day	96,000 ltrs / 24 hrs
Fuel Consumption	Diesel: 14ltr / hr Gas: 11.9 kg / cycle
Maximum Temperature	250°C
Total Connected Load	34.5 HP

<sup>\*-</sup> Specifications are subject to improvement



Straight	Arm
Spindle	4
Maximum weight on arm	St- 500 kg
Spider Diameter	1250 mm
Major Axis Speed Range	o-6 RPM
Minor Axis Speed Range	o-8 RPM
Furna	ce
Furnace Max Temperature	250°C
Burnerbox Max Temperature	300°C
Burner Capacity	95 - 240 kW
Circulating Blower CFM	12,000 CFM
Electri	cal
Supply Voltage	Std: 440V, 50 Hz, 3 Phase & Neutral (Can supply as per requirement)
Major Axis Drive AC Motor	2 HP
Minor Axis Drive AC Motor	1 HP
Circular Blower	5 HP

State of Art four arm bi-axial rotational moulding machine.



It is efficient in manufacturing 2 tanks of 1000ltr or 4 tanks of 500ltr or 1 tank of 2000ltr per cycle.

- Heavy-duty machine ensuring the reliability.
- Capable of making multi-layer foam tanks.
- · Maintenance free long operations.
- Only three semi-skilled persons required.
- Fuel & electricity efficient.
- · Suitable for all rotomoulding articles.
- Optional PLC touch screen HMI available

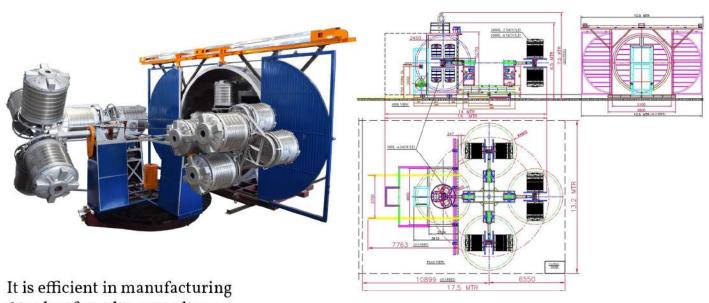
GENERAL SPECIFICATIONS	
Machine Size	Length: 12.5 mtr Width: 9.5 mtr Height: 5.3 mtr
Cycle time	Double Layer: 25 mins Triple Layer: 30 mins
Production per cycle	2000ltr x1 or 1000ltr x2
Production per Day	96,000 ltrs / 24 hrs
Fuel Consumption	Diesel: 14ltr / hr Gas: 11.9 kg / cycle
Maximum Temperature	250°C
Total Connected Load	34.5 HP

<sup>\*-</sup> Specifications are subject to improvement

Straight	Arm
Spindle	4
Maximum weight on arm	St- 500 kg   L- 250 kg
Spider Diameter	1200 mm
Major Axis Speed Range	o-6 RPM
Minor Axis Speed Range	o-8 RPM
Furna	ice
Furnace Max Temperature	250°C
Burnerbox Max Temperature	300°C
Burner Capacity	95 - 240 kW
Circulating Blower CFM	18,000 CFM
Electri	cal
Supply Voltage	Std: 440V, 50 Hz, 3 Phase & Neutral (Can supply as per requirement)
Major Axis Drive AC Motor	3 HP
Minor Axis Drive AC Motor	2 HP
Circular Blower	7.5 HP

# VI-4-2000x2

State of Art four arm bi-axial rotational moulding machine.



6 tanks of 300ltr or 500ltr or 4 tanks of 750ltr or 1000ltr per cycle or 2 tanks of 1500ltr or 2000ltr per cycle.

## VI-4-2000x2

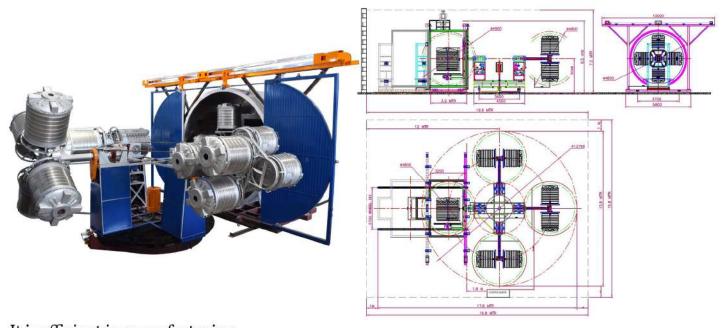
- Heavy-duty machine ensuring the reliability.
- Capable of making multi-layer foam tanks.
- · Maintenance free long operations.
- · Only three semi-skilled persons required.
- Fuel & electricity efficient.
- · Suitable for all rotomoulding articles.
- Optional PLC touch screen HMI available

GENERAL SPECIFICATIONS	
Machine Size	Length: 12.3 mtr Width: 10 mtr Height: 6.5 mtr
Cycle time	Double Layer: 30 mins Triple Layer: 35 mins
Production per cycle	2000ltr x2 or 500ltr x6
Production per Day	160,000 ltrs / 24 hrs
Fuel Consumption	Diesel: 18 ltr / hr Gas: 16 kg / cycle
Maximum Temperature	250°C
Total Connected Load	45 HP

<sup>\*-</sup> Specifications are subject to improvement

TECHNICAL SPECIFICATIONS	
Straight	-Arm
Spindle	4
Maximum weight on arm	St- 600 kg
Spider Diameter	1650 mm
Major Axis Speed Range	o-6 RPM
Minor Axis Speed Range	o-8 RPM
Furna	ce
Furnace Max Temperature	250°C
Burnerbox Max Temperature	300°C
Burner Capacity	95 - 240 kW
Circulating Blower CFM	18,000 CFM
Electri	cal
Supply Voltage	Std: 440V, 50 Hz, 3 Phase & Neutral (Can supply as per requirement)
Major Axis Drive AC Motor	3 HP
Minor Axis Drive AC Motor	2 HP
Circular Blower	7.5 HP

State of Art four arm bi-axial rotational moulding machine.



It is efficient in manufacturing 2 tanks of 2000ltr or 6 tanks of 500ltr or 1 tank of 5000ltr per cycle.

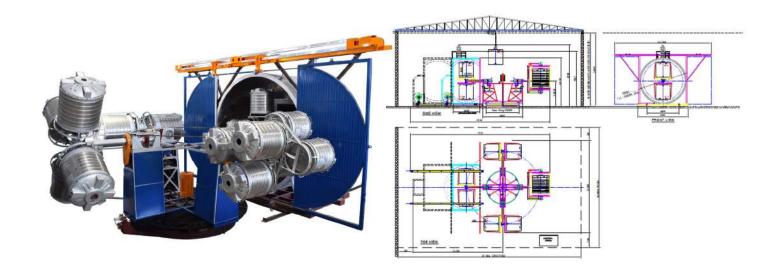
- Heavy-duty machine ensuring the reliability.
- Capable of making multi-layer foam tanks.
- · Maintenance free long operations.
- · Only three semi-skilled persons required.
- Fuel & electricity efficient.
- · Suitable for all rotomoulding articles.
- Optional PLC touch screen HMI available

GENERAL SPECIFICATIONS	
Machine Size	Length: 13.2 mtr Width: 10 mtr Height: 6 mtr
Cycle time	Double Layer: 45 mins Triple Layer: 50 mins
Production per cycle	5000ltr x1 or 2000ltr x2
Production per Day	140,000 ltrs / 24 hrs
Fuel Consumption	Diesel: 28ltr / hr Gas: 24 kg / cycle
Maximum Temperature	250°C
Total Connected Load	45 HP

<sup>\*-</sup> Specifications are subject to improvement

TECHNICAL SPECIFICATIONS	
Straight	-Arm
Spindle	4
Maximum weight on arm	St- 700 kg   L- 550 kg
Spider Diameter	2400 mm
Major Axis Speed Range	o-4 RPM
Minor Axis Speed Range	o-6 RPM
Furna	ce
Furnace Max Temperature	250°C
Burnerbox Max Temperature	300°C
Burner Capacity	95 - 240 kW
Circulating Blower CFM	24,000 CFM
Electri	cal
Supply Voltage	Std: 440V, 50 Hz, 3 Phase & Neutral (Can supply as per requirement)
Major Axis Drive AC Motor	5 HP
Minor Axis Drive AC Motor	3 HP
Circular Blower	10 НР

State of Art four arm bi-axial rotational moulding machine.



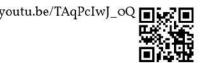
It is efficient in manufacturing 2 tanks of 5000ltr or 4 tanks of 2000ltr or I tank of 10,000ltr per cycle.



- Heavy-duty machine ensuring the reliability.
- · Capable of making multi-layer foam tanks.
- · Maintenance free long operations.
- · Only three semi-skilled persons required.
- Fuel & electricity efficient.
- · Suitable for all rotomoulding articles.
- Optional PLC touch screen HMI available

GENERAL SPECIFICATIONS	
Machine Size	Length: 16.5 mtr Width: 12 mtr Height: 7.2 mtr
Cycle time	Double Layer: 60 mins Triple Layer: 65 mins
Production per cycle	10000ltr x1 or 5000ltr x2
Production per Day	240,000 ltrs / 24 hrs
Fuel Consumption	Diesel: 32ltr / hr Gas: 27 kg / cycle
Maximum Temperature	250°C
Total Connected Load	62 HP

<sup>\*-</sup> Specifications are subject to improvement



TECHNICAL SPE	CIFICATIONS
Straight	Arm
Spindle	4
Maximum weight on arm	St- 1000 kg   L- 950 kg
Spider Diameter	2800 mm
Major Axis Speed Range	o-4 RPM
Minor Axis Speed Range	o-6 RPM
Furna	ce
Furnace Max Temperature	250°C
Burnerbox Max Temperature	300°C
Burner Capacity	130 to 1050 kW
Circulating Blower CFM	24,000 CFM
Electri	cal
Supply Voltage	Std: 440V, 50 Hz, 3 Phase & Neutral (Can supply as per requirement)
Major Axis Drive AC Motor	5 HP
Minor Axis Drive AC Motor	3 HP
Circular Blower	10 НР

Advanced Bi-axial Rotational moulding machine specially for making intricate components and deep cavity double walled with high precision.



- Highly suitable for making deep cavity double. walled products like ice-box.
- Excellent at foam & special material processing.
- Symbolic representation on touch screen making it highly user friendly.
- Maintenance free long operations.
- High fuel and electric efficiency.

GENERAL SPECIFICATIONS	
Machine Size	Length: 14 mtr Width: 9.1 mtr Height: 4.2 mtr
Burner make	Waishapt (German) or Reillo (Italian)
Added extra air circulation	Air injection through arm
Selective Heating	Stop & Roll   Arm delay
Control Panel	PLC, Touchscreen HMI & ROTOVIN software
Maximum Temperature	350°C
Total Connected Load	37 HP

<sup>\*-</sup> Specifications are subject to improvement

TECHNICAL SPE	CIFICATIONS
Arm	s
Spindle	4
Maximum weight on arm	St-1000 kg   L-800 kg
Spider Diameter	St-2600mm   L-2400 mm
Major Axis Speed Range	o-8 RPM
Minor Axis Speed Range	0-12 RPM
Furna	ce
Furnace (max. temp.)	350°C
Firing Chamber (max. temp.)	400°C
Circulating Blower CFM	18,000 CFM
Exhaust Blower CFM	2,400 CFM
Electri	cal
Supply Voltage	Std: 440V, 50 Hz, 3 Phase & Neutral (Can supply as per requirement)
Major Axis Drive AC Motor	3 HP
Minor Axis Drive AC Motor	2 HP
Circular Blower	5 HP x 2

Advanced Bi-axial Rotational moulding machine specially for making intricate components and deep cavity double walled with high precision.



- Highly suitable for making deep cavity double. walled products like ice-box.
- Excellent at foam & special material processing.
- Symbolic representation on touch screen making it highly user friendly.
- Maintenance free long operations.
- High fuel and electric efficiency.

GENERAL SPECIFICATIONS	
Machine Size	Length: 10.7 mtr Width: 9.5 mtr Height: 5 mtr
Burner make	Waishapt (German) or Reillo (Italian)
Added extra air circulation	Air injection through arm
Selective Heating	Stop & Roll   Arm delay
Control Panel	PLC, Touchscreen HMI & ROTOVIN software
Maximum Temperature	350°C
Total Connected Load	35 HP

<sup>\*-</sup> Specifications are subject to improvement

<b>*</b>		
Arm	S	
Spindle	4	
Maximum weight on arm	St-1000 kg   L-800 kg	
Spider Diameter	2400 mm	
Major Axis Speed Range	o-8 RPM	
Minor Axis Speed Range	0-12 RPM	
Furna	ce	
Furnace (max. temp.)	350°C	
Firing Chamber (max. temp.)	400°C	
Circulating Blower CFM	18,000 CFM	
Exhaust Blower CFM	2,400 CFM	
Electri	cal	
Supply Voltage	Std: 440V, 50 Hz, 3 Phas & Neutral (Can supply as per requirement)	
Major Axis Drive AC Motor	3 HP	
Minor Axis Drive AC Motor	2 HP	
Circular Blower	5 HP	

Advanced Bi-axial Rotational moulding machine specially for making intricate components and deep cavity double walled with high precision.



- Highly suitable for making deep cavity double. walled products like ice-box.
- Excellent at foam & special material processing.
- Symbolic representation on touch screen making it highly user friendly.
- Maintenance free long operations.
- High fuel and electric efficiency.

GENERAL SPECIFICATIONS	
Machine Size	Length: 10.7 mtr Width: 9.5 mtr Height: 5 mtr
Burner make	Waishapt (German) or Reillo (Italian)
Added extra air circulation	Air injection through arm
Selective Heating	Stop & Roll   Arm delay
Control Panel	PLC, Touchscreen HMI & ROTOVIN software
Maximum Temperature	350°C
Total Connected Load	35 HP

<sup>\*-</sup> Specifications are subject to improvement

<b>*</b>		
Arm	S	
Spindle	4	
Maximum weight on arm	St-1000 kg   L-800 kg	
Spider Diameter	2400 mm	
Major Axis Speed Range	o-8 RPM	
Minor Axis Speed Range	0-12 RPM	
Furna	ce	
Furnace (max. temp.)	350°C	
Firing Chamber (max. temp.)	400°C	
Circulating Blower CFM	18,000 CFM	
Exhaust Blower CFM	2,400 CFM	
Electri	cal	
Supply Voltage	Std: 440V, 50 Hz, 3 Phas & Neutral (Can supply as per requirement)	
Major Axis Drive AC Motor	3 HP	
Minor Axis Drive AC Motor	2 HP	
Circular Blower	5 HP	

Advanced Bi-axial Rotational moulding machine specially for making intricate components and deep cavity double walled with high precision.



- Highly suitable for making deep cavity double. walled products like ice-box.
- Excellent at foam & special material processing.
- Symbolic representation on touch screen making it highly user friendly.
- Maintenance free long operations.
- High fuel and electric efficiency.

GENERAL SPECIFICATIONS	
Machine Size	Length: 10.7 mtr Width: 9.5 mtr Height: 5 mtr
Burner make	Waishapt (German) or Reillo (Italian)
Added extra air circulation	Air injection through arm
Selective Heating	Stop & Roll   Arm delay
Control Panel	PLC, Touchscreen HMI & ROTOVIN software
Maximum Temperature	350°C
Total Connected Load	35 HP

<sup>\*-</sup> Specifications are subject to improvement

<b>*</b>		
Arm	S	
Spindle	4	
Maximum weight on arm	St-1000 kg   L-800 kg	
Spider Diameter	2400 mm	
Major Axis Speed Range	o-8 RPM	
Minor Axis Speed Range	0-12 RPM	
Furna	ce	
Furnace (max. temp.)	350°C	
Firing Chamber (max. temp.)	400°C	
Circulating Blower CFM	18,000 CFM	
Exhaust Blower CFM	2,400 CFM	
Electri	cal	
Supply Voltage	Std: 440V, 50 Hz, 3 Phas & Neutral (Can supply as per requirement)	
Major Axis Drive AC Motor	3 HP	
Minor Axis Drive AC Motor	2 HP	
Circular Blower	5 HP	

# Rotolining

Bi-axial rotational moulding machine for seamless lining of pipes and vessels.

Vinodrai Engineers has developed a range of special rotational moulding machine most suitable for Rotolining application. The rotolining process allows for a seamless polymer coating to be applied to the interior surfaces of metal vessel, pipeline, pipe fittings or any hollow metal structure to protect against corrosion and abrasion in chemical services.

Vinodrai rotolining machines are state of the art piece of technology surpassing any global standard rotolining equipment. Machines are designed to give processing temperatures suitable for LLDPE / HDPE / XLPE / Nylon PA12, PVDF and PTFE. Rotating arms are designed for highier weight carrying capacity.

### **Applications:**

Chemical, Pharmacituclw, Food Processing, Effluent Treatment, Oil & Gas Industry, Storage Vessels, Reactors and Pipe.



## **Custom Machines**

Bi-axial rotational moulding machine custom made to suit your needs.

We offer rotational moulding machines that suit your needs. Rotomoulding of value added products in a general water tank machine implies extra cost of production, thus we offer machine that suits your application and size of your product.

Laboratory model is one such example developed for CIPET. It is suitable for your research and development, innovations, raw material testing, small batch production and training needs. It is equipped with PLC and touch screen HMI with ROTOVIN software. You can track your temperature curve, save the receipe, track production parameters.







## PLC & HMI

Vinodrai Engineers Pvt Ltd offers **PLC control** option with all of it's machines. These are equipped with a main control panel, an operating podium and two satelite pendents provided near to cooling and loading station for operators convience. Main Panel houses all power switchgears, PLC and A.C Drives. The PLC controlled machines are IoT ready and give you a complete remote access of the machine.

The **Human Machine Interface** comprises of Gorrilla Glass touch screen HMI with Stunning Clarity, Multi-Touch Capability, Scratch Resistance and UV and Chemical Resistance for Harsh shopfloor environment. It is powered by our ROTOVIN software making the machine Industry **4.0** Ready.





### Why choose PLC control over manual control?

- · Accurate process control.
- Highly suitable for value-added products like multi-layered foamed tanks.
- · Unique features in ROTOVIN software.
- · Ease of operation.
- · Easy Diagnostic Features.
- · Easy to understand and maintain the machine.
- · Interlocks for safe operation of Machine.
- · Alarms and Messages for faults.
- · Log for Alarms.
- · Remotely check Production status and export production reports.
- · Remote Tele-service can be provides.
- Machine controls can be upgraded in future with new software.

## **ROTOVIN Software**

Vinodrai Engineers has developed world class machine operating and process control software called ROTOVIN. All the PLC controlled machines are powered with this in-house built software. Capability of making the software in-house makes it easy for us to help you during troubleshooting and also to customise the software as per customer needs. Our software is in itself a treasure of best moulding practices and learnings from our customer experiences of over 30 years. The software is icon based removing the language barrier and making it easy and joyous for use.











### Salient Features of ROTOVIN software:

- · Reciepe Storage and application
- · Stop and Roll mechanism
- · Auto-reversal
- Auto Indexing
- · Multi-layer setting
- Temperature Curve control
- · Arm Balancing indicator
- · Safety interlocks
- · Restricted access for heads, supervisor & operators
- · Maintenance Schedule Alarms
- · Production Reports that can be exported in excel.
- · Monitor the production remotely
- · We can remotely take control online to troubleshoot
- Software updates to add new features

## **Pulveriser**

Realizing the needs of the rotational moulders, engineers at Vinodrai set out to develop the next generation two stage pulverizer



- Ability and control to give uniform and consistent powder quality.
- Power required per kg should be low for given mesh size.
- Cooling of grinding elements must be sufficient and effective.
- High output rate to meet ever growing demand.
- · Ability to run machine un-attended.
- All system protection to minimize breakdowns.
- Easy to clean and short color change over time.
- User-friendly operation

## Pulveriser

Two Stage Disc Mill: Disc mill is heart of pulveriser. Two stage feature insures course and fine grinding. This increases the life of fine teeth. Disc are made from special alloy steel imported from BOHLER Germany. Easy opening of the disc mill on hinge insures quick cleaning. No need to set the gap every time mill is opened for cleaning.

Bearing Housing: Heavy duty, graded cast housing results in smooth running of the mill. Bearing set up is designed to take care of heavy thrust of grinding. Oil bath lubrication results in less energy consumption. Machine is also available with automatic oil circulating lubrication system. Disc is mounted on taper nose of the shaft to insure true rotation & easy dismantling. Moving Disc Cooling: "Dublin" USA make special rotaryunion supply water to moving disc through shaft. This not only cools moving disc but also keeps bearing running cool. This results in increased output & machine can grinding heat sensitive polymers. Taper lock pulley from "Fenner" improves transmission efficiency. Vibratory Screen & Cyclone: Large volume cyclone for efficient separation of powder and vibratory screen with anti-blocking deck insure trouble free flow of powder

TECHNICAL SPECIFICATIONS	
Type of Pulveriser	Disc Mill
Disc Diameter	450 mm
Main Mill Motor	40 HP
Output (LLDPE RM Grade)	120 kg
Vibro Sievers	1200 mm
Sievers Motor	1.5 HP
Airlock Valve	0.5 HP 16 RPM
Blower	5.0 HP
Water cooling	Stator Disc, Rotor Disc, Main Shaft
Disc Temperature Monitor	Yes
Motor Current Monitor	Yes
Magnetic Separator	Yes
Auto Lubrication Pump	Optional
Electrical Supply	Std: 440V, 50 Hz, 3 Phase & Neutral (Can supply as per requirement)
Connected Load	47 HP
Overall Dimensions	3.0m x 2.8m x 4.0m
Gross weight	3000 kg

<sup>\*-</sup> Specifications are subject to improvement

## **Fabricated Moulds**

A superior quality product finish can only be achieved with a mould with equally superior surface finish. At Vinodrai we have developed a world class infrastructure to make preciser mould with highest achievable surface finish. A complete assembly line for manufacturing water tank moulds includes a laser cutting machine, CNC shear cutting machine for precise profile cutting.





Next, we have special purpose machine for bending two flats together & a Vertical turning machine for profiling the flats to give the best match. Automatic drum rolling machines and grooving machine and hydraulic press constitute the sheet metal forming infrastructure.

All these machines in synergy with our highly skilled and exprienced fabricators who assemble and finish the moulds. Raw material coming directly from reputed steel company to make sure the moulds have good quality and long life. We are capable of designing and making custom sheet metal fabricated molds as per your requirements.



## **CNC Moulds**

With a highly-skilled team of professionals with many years of experience in all aspects of tool making, our capabilities include full Computer-Aided Design(CAD)/Computer Aided Manufacture (CAM) facilities, in-house Aluminum Casting and High-speed CNC machining provides the most accurate tooling construction possible. Our tool room is well equipped to produce the most intricate of moulds.





### **Steel CNC Machined Moulds:**

- We have 4 VMCs dedicatedly working on producing the highest quality moulds as per customer requirements.
- All our moulds come with frames and clamps for easy operation.
- We offer teflon coating, sandblasting and itching for mould surface finish.
- •We offer hybrid moulds (fabricated and CNC machined) as well.

### **Cast Aluminum CNC Moulds:**

- An in-house Aluminum casting facility is available complete from pattern making to pouring the casting.
- Our thoroughly trained team of operators design programs to reduce machining time so as to provide moulds at most competitive costs.
- Moulds with provision of inserts is also alvailable.



# **Troubleshoot**

Problem	Pausible cause	Solution
Parts stick in mold	Ineffective mold release  Roughness & porosity of mold surface provide areas where resin may adhere	Reapply or use more release agent or Use a suitable mold release agent that is effective for resin & temp used Refinish damaged mold surfaces (plug weld smooth)
Warped parts	Inadequate venting.  Non-uniform cooling of the mold	Provide adequate venting IO to I3 mm dia vent per m3 of mold volume is suggested for thin-walled parts. Reduce cooling rate during initial part of cooling cycle. Avoid large, flat panels in part design, if possible.
Excessive flashing at mould parting line	Internal mold pressure tends to force semi-molten resin out via parting line.	Provide adequate venting. Remate mold parting line and adjust mold clamp pressure evenly.
Discoloration of inside surface of part	Degradation of resin due to high temp or longer heating cycle.	Decrease oven temperature or heating cycle, or purge part with inert gas. Use resin containing the proper amount and type of antioxidant.
Poor impact resistance	Resin selection not correct Density increase during slow cooling Insufficient fusion of resin.	Use a lower density or lower melt index resin. Increase the cooling rate to maintain a lower density. Increase temperature of heat time
Poor part stiffness	Part wall too thin. Resin selection not correct Under fused parts	Add more powder to the initial charge. Use a resin of a higher density. Increase oven temperature or total heating cycle. Increase heat–transfer rate by using thinner mold walls
Uneven wall thickness of molded parts	Improper mold rotation  Insufficient airflow in deep cavity areas	Vary ratio and speed of the rotating mold to obtain even coverage and an adequate number of powder tracings Use extra air inlet system or use stop and roll mechanism to selectively place required area in front of blower.

## **LLDPE Powder**

To obtain the desired end product, the choice of a quality powdered resin is essential in rotational molding. LLDPE (Linear Low Density Polyethylene) in its powdered form is most widely used raw material in Rotational moulding.

### LLDPE Powder is generally recommended for:

- · Overhead water tanks
- · Storage bins
- Toys and traffic barriers
- · Sanitation & Agriculture products
- Rotomolding applications requiring outdoor exposure

### In-house storage care:

Bags should be stored in dry / closed conditions at temperatures below 50°C and protected from UV or direct sunlight.

Bags must be kept away from the furnace or any other imflamable objects.



LLDPE Properties	
Powder mesh	Ideal: 30-35 mesh
	General: 20 mesh
Melt Flow Index	4 g/10 min (190°C & 2.16 kg)
Dry Flow	18-25 sec
Density	0.938 g/cm3 (at 23 °C)
Bulk density	0.340 g/cm3
Recommended Process Temperature	180-220°C

# **Handy Contacts**

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Address:	
Website:	Notes:
	7). Q
Company:	Contact Person:
Mobile:	Email:
Address:	
Website:	Notes:

## Global Presence

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