



VINODRAI

ENGINEERING YOUR GROWTH

*The measure of success is
happiness and peace of mind.*



Engineering Your Growth

Four Arm Bi-Axial Rotational Moulding Machine

DUROLINE Series



Acknowledging the requirement of our customers to produce deep cavity double wall technical parts, Vinodrai Engineers has introduced **DUROLINE** series of Four Arm Bi-Axial Rotational Moulding Machines.

DUROLINE series machines are highly productive state of the art piece of technology surpassing any global standard machine. These are highly suitable for manufacturing a wide variety of Rotational Moulded Products.

Constructional rigidity, unattended reliability and user friendliness in operations are the hall marks of **DUROLINE** series of machines.

DUROLINE series offers customised combination of high load capacity straight and offset arms. Moulding parameters for each arm can be defined independently for both heating and cooling cycles.

Control panel of the machine is PLC based with user friendly touch screen operator interface. Machine is IoT ready and capable of receiving teleservice.

Machine is designed to give you peace of Mind.

Highlights of **DUROLINE** Series of Machines



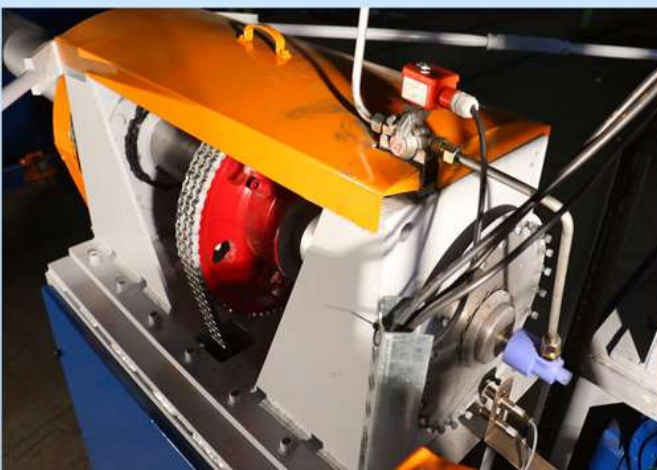
OVEN : Vinodrai pioneered in India to manufacture machines with cylindrical oven, which provides an aerodynamic geometry for highly turbulent airflow around mould avoiding hot spots. High speed twin re-circulating blowers insure upward hot-air flow resulting in considerable improve-

ment in the distribution of heat inside the oven & short cycle time. Structure of the oven is heavy duty to withstand 24 hours a day operations at 350 oC for years together.

DUROLINE range of machines are equipped with diesel fired Italian burner. Optionally LPG or Natural gas burner is available.



TURRET : Heavy Duty motor indexing turret carries the set of straight and offset arms. Electrical and Pneumatic Supply is provided through well designed slip-rings and rotary union respectively. Arms are driven by heavy duty gearboxes and variable A.C. drive driven motors.



Unique STOP N ROLL Arrangement : All arms are equipped with encoder disc, which gives angular position feed back to PLC. Deep Cavity sections of mould can be selectively heated by Stopping N Rolling in front of the blower for defined time. You can define three angular positions and stop n roll time for each arm.

Internal Air supply through shaft for air amplifire or pneumatic operated dropbox.

CONTROL PANEL : Duroline machines are equipped with one main control panel, one operating podium and two satellite pendants. Main Panel houses all power switchgears, PLC and A.C Drives.

Panel A.C. is provided for operation in higher temperature environment. Two satellite pendants are provided near to cooling and loading station for operators convenience. All electrical switchgear and accessories are of international standard. Allen Bradley, Simens, Schnider Electric & Exor are our Automation Technology Partners.



HUMAN MACHINE INTERFACE : State of the Art, Gorrilla Glass touch screen HMI with Stunning Clarity, Multi-Touch Capability, Scratch Resistance and UV and Chemical Resistance for Harsh shopfloor environment. It makes the machine Industry 4.0 Ready.

ROTOVIN SOFTWARE : Vinodrai Engineers has developed world class machine operating and process control software. Independent Recipe management for each arm makes production hassel free. Software comes with features aiding easy manufacturing of Multi Layered and Foamed Products. Air Injection, Arm Balancing, Stop&Roll, Production Log, Temperature Profile Control, Alarms, History and Diagnostic feedback are some of the highlight of ROTOVIN Software. ROTOVIN Software enables the machine for Teleservice .

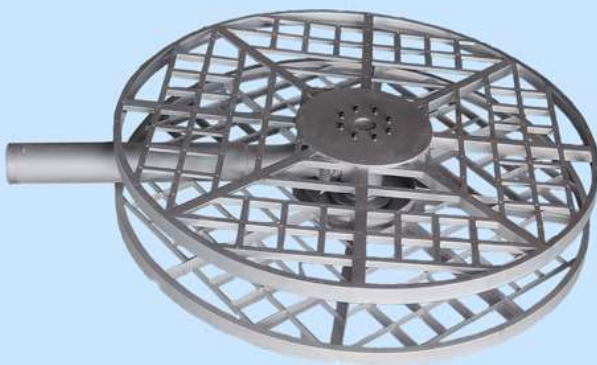


Heavy Duty Arms make **DUROLINE** a reliable Workhorse.



Heavyduty offset arm is designed with higher factor of safety. Fabricated from prime steel, welded and stress relived to give long life. Auxiliary shaft is made by forged steel and supported with heavy duty bearings.

Arm has built-in adjustable balance weight arrangement for correcting any unbalance. Extent of unbalance is indicated on HMI. Arm is also equipped with air injection arrangement.



Heavyduty Straight arm is designed with higher factor of safety. Machined from ultrasonically tested prime steel. Auxiliary shaft is made by forged steel and supported with heavy duty bearings. Spiders are suitable for multiple mould mounting. Extent of unbalance is indicated on HMI. Arm is equipped with air injection arrangement.

Offset arms and Straight arms are easily interchangeable, we also supply spare arms if your market needs require change in configuration of the machine.

Making Ideas Happen Peacefully

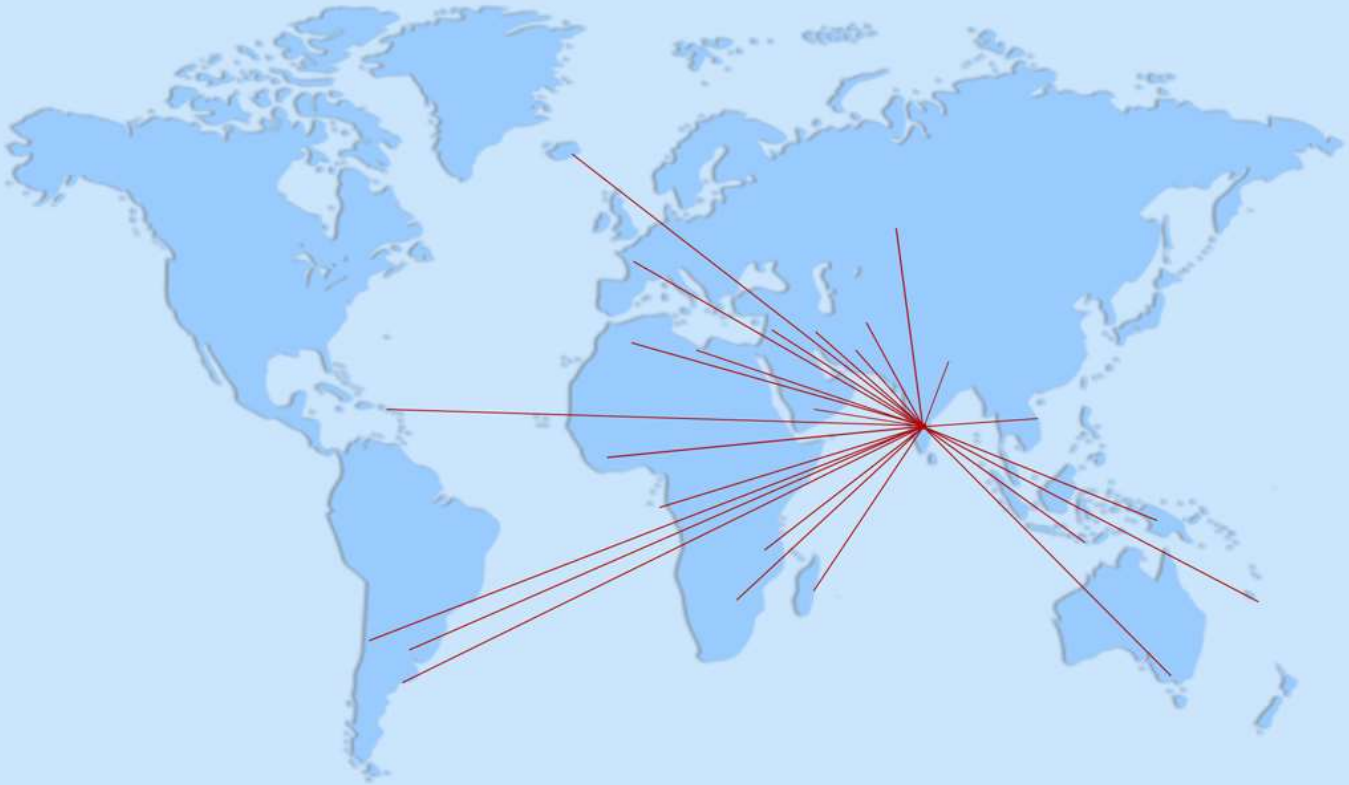


Any Product, Any Shape



VINODRAI
ENGINEERING YOUR GROWTH

Global Technological Partner

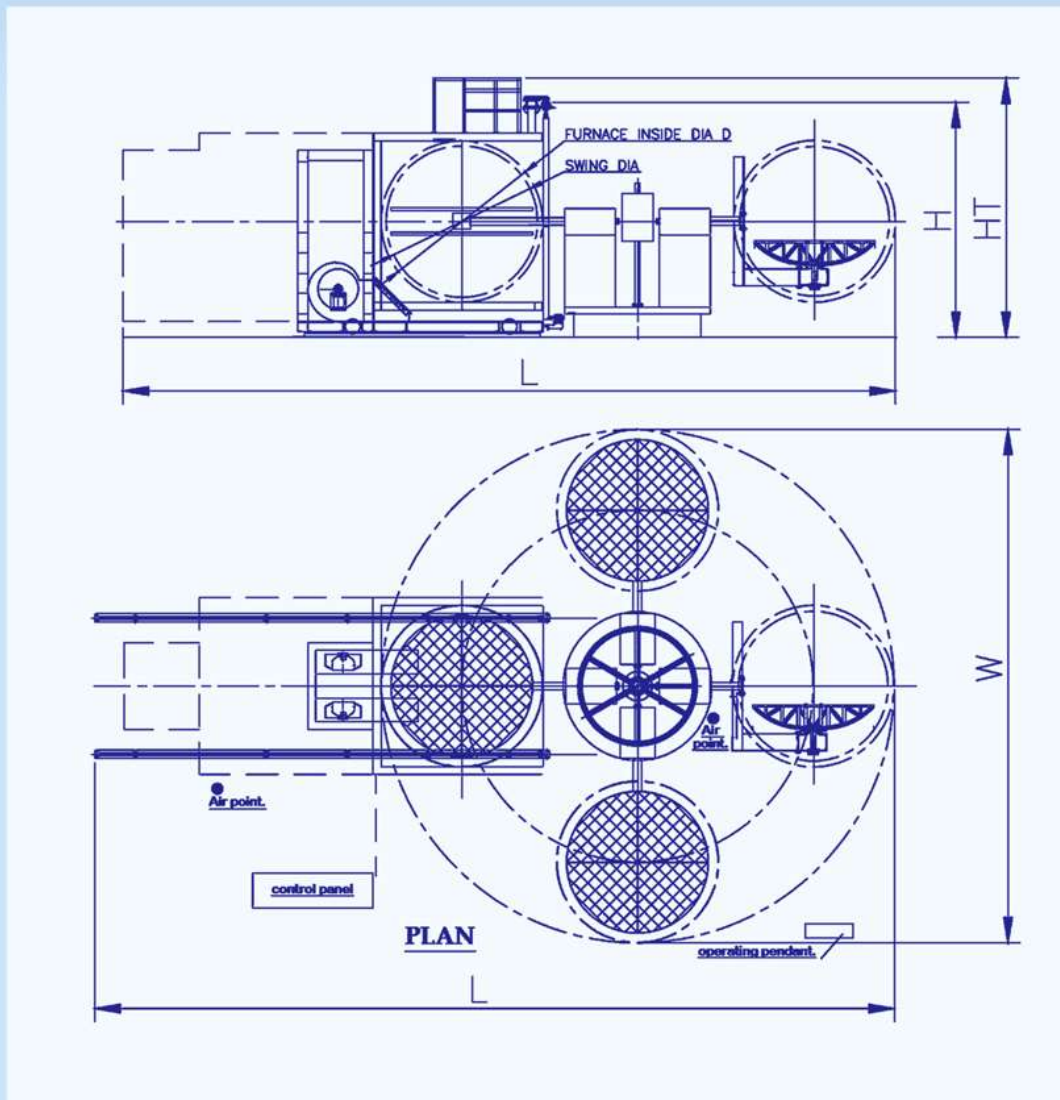


Alegria, Argentina, Australia, Baharin, Belgium, Bulgeria, Cape Varde, Chad, Chile, Cyprus, Dubai, Egypt, Ethopia, Fiji, Finland, France, Gaza, Ghana, Guinee Bissau, Haiti, Honduras, Indonesia, Iraq, Ireland, Italy, Kenya, Kuwait, Lebanon, Libya, Macedonia, Malaysia, Madagascar, Malawi, Mauritius, Mayanmar, Mozambique, Nepal, Nigeria, Oman, Qatar, R.O. Congo, Russia, Saudi Arabia, Tanzania, Thailand, Togo, Tunisia, Turkey, United Kingdom, Ukraine, Uruguay, USA, Uzbekistan, Vietnam, Yemen, Zambia & Zimbabwe.



Value For Money

DUROLINE Machine Plant Layout



MODEL	FURNACE INSIDE DIA D IN MM	SWING DIA IN MM	REQUIRED SPACE IN METERS		
			L	W	H
VEPL-4A-2800	2800	2400	16.0	10.0	5.0
VEPL-4A-3200	3200	2800	18.0	11.5	5.7
VEPL-4A-3600	3600	3200	20.0	13.5	6.2
VEPL-4A-4000	4000	3600	22.0	15.0	7.0

* Sizes and Specifications are subjected to improvements



VINODRAI ENGINEERS P. LTD.

12 Km Stone, Jalna-Aurangabad Road, Village Dawalwadi, Dist: Jalna, Jalna- 431 203 (Maharashtra), India.

Phone: +91 2482 262000, E Mail: vinodraieng@gmail.com

www.vinodrai.com