

OBSESSED WITH QUALITY
SINCE
1973

LAB SCALE EQUIPMENTS



neoplast[®]

People you can believe



www.neoplastindia.com

Since 1973, Neoplast is known as the reliable and efficient partner in plastic industry. What started as a small structured family-owned enterprise is now acknowledged as most renowned, reputed and reliable partner for the plastic processing machinery in Global market. Neoplast has won its customers continued trust by always providing them with a "perfect solution to their specific requirements", and this has helped Neoplast to emerge as a market leader with about 70% India market share.

At Neoplast quality and innovation is a way of life and thus the R&D is given a much due importance. The company has a dedicated team of professionals that has been instrumental in this success. However, it is Neoplast's customers, who have the greatest share in its success. Their trust in getting the perfect solution for their specific requirements and their confidence in Neoplast's state-of-the-art technology has made Neoplast what it is today.

Last but not the least...Neoplast is committed to work towards its goal, that of attaining global leadership in the manufacturing of machinery and equipment for the plastic industry.

Lab Extruder

Neoplast has developed first time in india a fully instrumented single screw & Twin screw lab extruders with integrated data acquisition PLC. This machine can be attached to various downstream equipments to carry out varieties of testing like extrudability of polymers, studying the problem occurring in R & D as well as in practical applications. Manifold screws, die heads and downstream equipment fulfill all kinds of extrusion tasks.

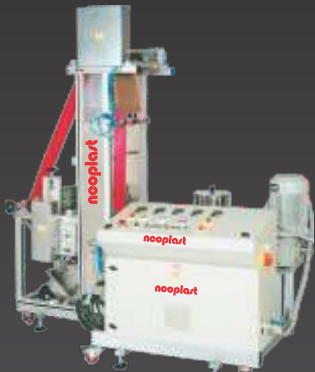
The sample material is plastified and extruded through die head. All measuring values such as torque, melt pressure, melt temperature are recorded continuously and represented in the form of tables and graphs parallel to running test.

Salient Features:

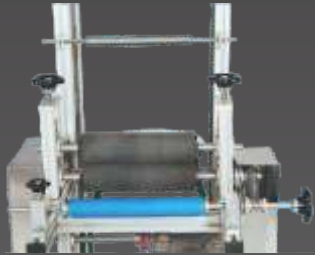
- Single screw & Twin screw lab extruders with integrated data acquisition PLC.
- Screen changer with provision of melt pressure and melt temperature transducer.
- Breaker plate holding with quick opening arrangement to change the screen pack.
- Geared melt pump ensures pumping of polymer melt at a constant pressure.
- Filter test measurement assembly designed in line with standardization specification norms EN 13900-5.



Blown Film Attachment - For Dispersion Testing



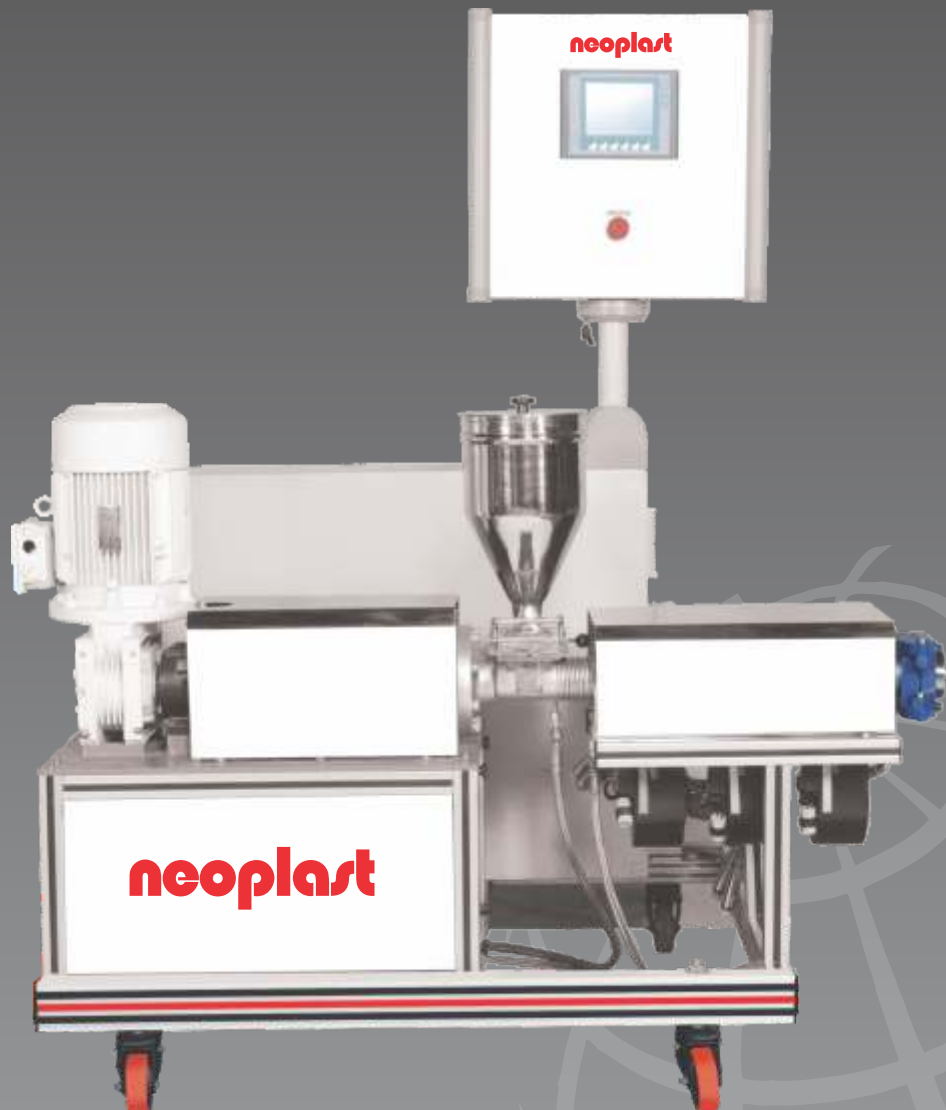
Take Off Tower



Tube Winder

Salient Features:

- Elegant structure made from light weight aluminum profile.
- Blown film attachment comprises of Die Head, Air Ring, Take off tower and single station center winder.
- Die head is 50 mm dia which is made from SS 410, mirror polished and hard chrome plated.
- Air ring is designed with adjustable single lip to control the air flow. A Specially designed blower controlled on suction side and discharge side.
- The take off tower is with 300 mm wide & 100 mm dia. Pneumatically operated nip rollers driven by variable speed geared AC motor.
- The complete assembly is mounted on two pillar structure with adjustable height upto 400 mm.
- Single station tube winder with 50 mm core dia. Driven by specially designed torque with film tension adjustment.



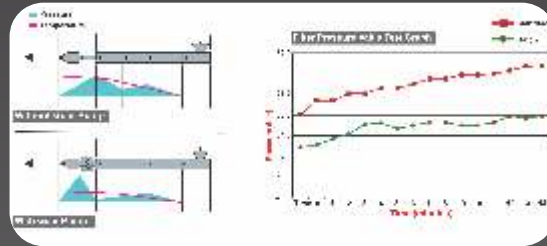
Melt Properties Measurement - For Filterability Testing

Salient Features:

- The lever type single action manual screen changer is provided with provision of melt pressure and melt temperature transducer mounting.
- The breaker plate holder is provided with quick opening arrangement to change the screen pack easily.
- The optional geared melt pump ensures pumping of polymer melt at constant pressure.
- The filter test measurement assembly designed in line with standard specification norms EN 13900-5.



Melt Pump



Pelletizing Attachment- For Masterbatch Compound Testing

Salient Features:

- Pelletizing attachment consists of strand die head, water trough & strand cutter.
- All material contact parts are made of SS 304.
- The strand cutter is provided with carbide tip for better quality of the pellets.
- Long life of cutting blades.



Water Trough

Pipe & Tube Attachment

Salient Features:

- Pipe die head with 10 mm OD & 0.8 mm thickness insert is provided for RPVC Pipe formulation.
- 1 meter long baby vacuum sizing tank made of SS 304 with vacuum calibration sleeve.
- Baby hauloff for pulling the pipes/tubes driven by AC drive for controlling the line speed.
- The extruded pipe can be cut manually by pipe cutter.



Vacuum Sizing Tank

Control Panel

Salient Features:

- The Lab Extruder is designed with fully instrumented control desk for monitoring and controlling processing parameters.
- The design of the control panel can be customized to suit the process requirement. The temperature controllers are provided with auto tuning, dual display and with PID control.
- Optional PLC with HMI can be incorporated to record processing parameters like temperature, ampere, screw speed, melt pressure, melt temperature etc. The stored data can be printed with computer interface.

Other Optional Attachments:

- T-Die for sheet extrusion
- Wire Coating Die
- Rod Die
- Swatch Moulding Die

Lab Mixer

Salient Features:

- Jacketed / Non Jacketed Container of 5 Liters to 10 Liters Vessel Capacity.
- Vessel Inner and Outer Surface, lid, valve plunger are made of SS 304 and Mirror Polished.
- The mixing tool is driven by high torque AC motor controlled by AC variable frequency drive. The tool speed can be varied from 50 RPM to 1500 RPM.
- Pneumatically operated lid and discharge gate.
- Specially designed bottom curvature of mixing vessel gives perfect vortex formation results into homogeneous and free flowing dry blend.
- Frictional heat efficiently prepares the best quality of dry blend.
- Optimum degree of dispersion is our most versatile virtue.
- Quick detachable vessel can be offered for better and faster cleaning (optional).
- The control panel consisting of programmable controls for optimum adaptability to the process requirements.
- Lab cooler mixer with cooling cone also can be incorporated.



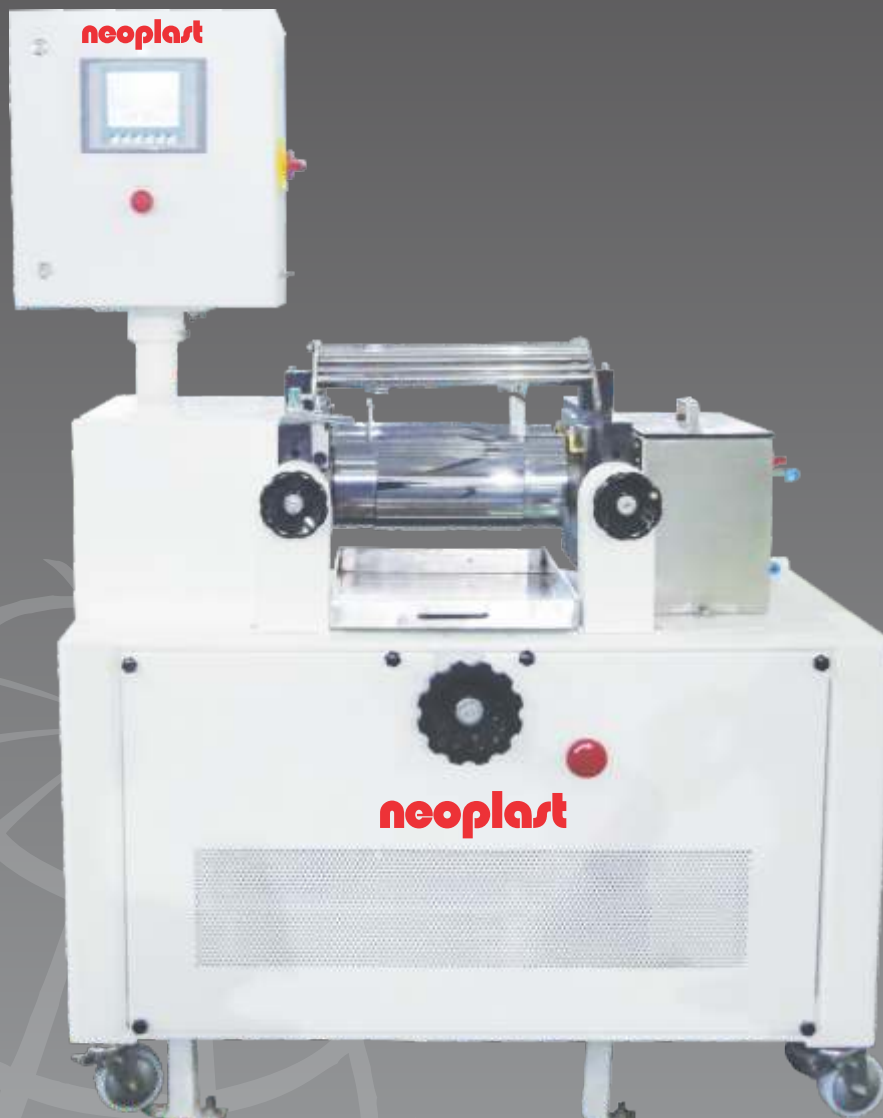
Two Roll Mill

Optional Features:

- Basic PLC with Automation.
- Torque measurement can be possible on both rolls.
- Trends like time < -- > temp. & time < -- > Amp. Can be viewed as well as printed.
- Advance safety features.
- Attractive and user friendly control panel.

Salient Features:

- Cartridge heaters for optimum even heat distribution over entire roll surface.
- Roll temperature upto 300 °C.
- PLC controlled with HMI (Optional).
- Hard chrome plated, ground and mirror polished surface.
- Safety guards provided for operator during handling.
- Drive system with geared motor and AC drive for high starting torque.
- Motorized nip gap adjustment device.
- Roll RPM can be set from 2 to 20 RPM.
- Rolls cooled by water cooling arrangement which is collected in a SS water cooling tank.



Hydraulic Press

Neoplast make hydraulic presses are designed to meet the diverse need of industry. NEOPLAST presses are used in many applications including R & D, Q.C. of PVC/Engineering/Rubber Compound, and Color matching etc. used for low volume production situations and quality testing in biological and mechanical fields wherever compressing is required.

Salient Features:

- Specially designed bench top press, mounted on caster wheels for easy movement.
- Clamp force -50 T with four column sturdy structure.
- Built-in hydraulic system for accurate programmable operation.
- Digital display of hydraulic pressure and process temperature.
- Semi-automatic or Fully automatic controls.
- Aluminum casted plate type heaters.
- Cooling by water/compressed air.
- Protection cage on hot platen for safety.
- Mould as per custom made design.

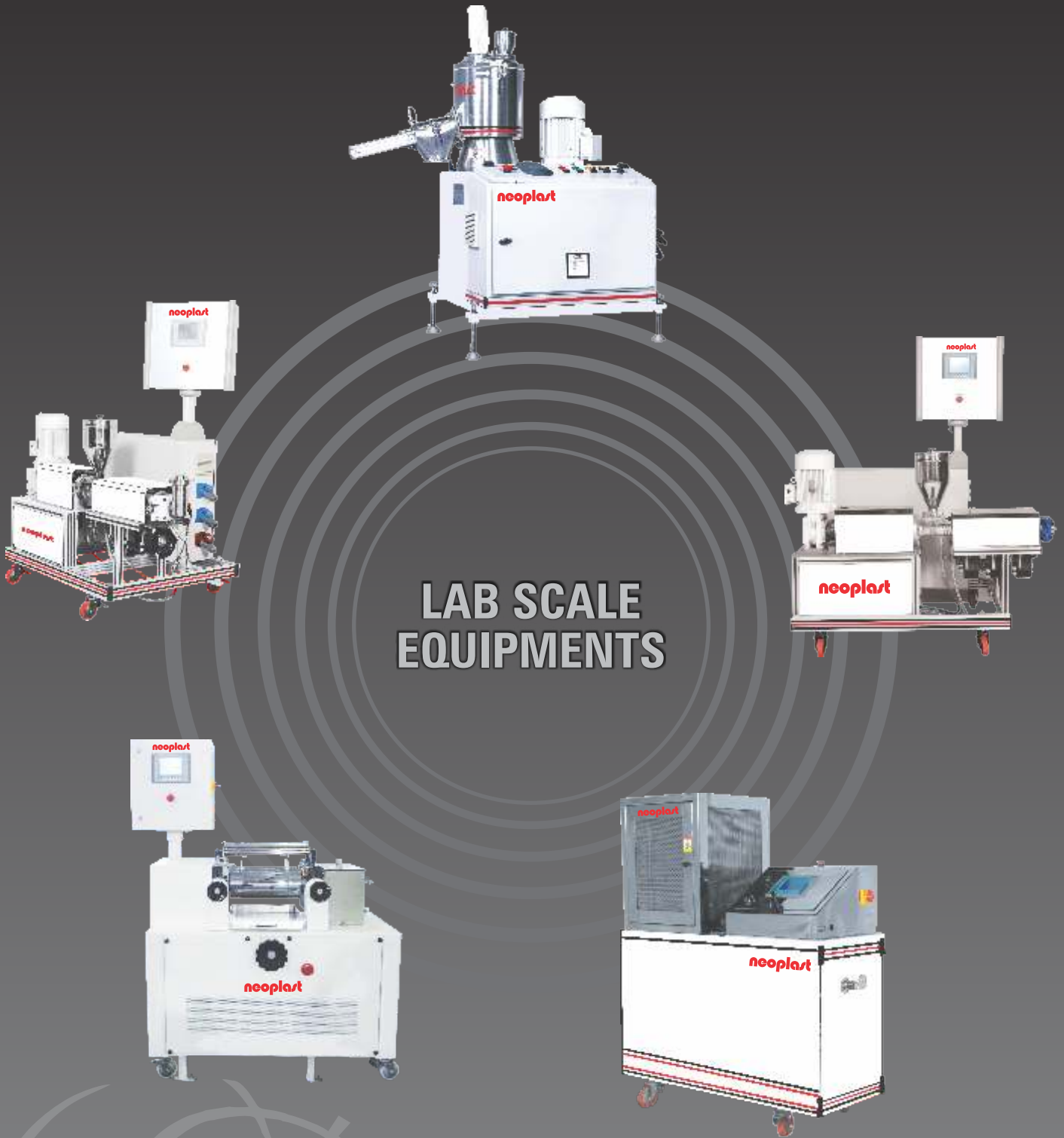
Optional Features:

- Individual chamber for heating and cooling of sample.
- Advance safety features.
- Attractive and user friendly control panel.



**Protection cage
on hot platen**





LAB SCALE EQUIPMENTS

neoplast

Engineering Pvt. Ltd.

Unit:1

Plot No.43, GIDC, Industrial Estate,
Phase-I, Vatva, Ahmedabad-382445
Phone No.: +91-79-40304184/85/86/87/88

Corporate Address

A-7, 2nd floor, Safal Profitaire, Corporate Road,
Nr. AUDA Garden, Ahmedabad - 380015
Phone No.: 079-40194030 (4 Lines),

Unit: 2

Plot No.138, Chacharvadi Vasana,
Nr. Divya Bhaskar Press,
Sarkhej-Bavla Road, Ahmedabad-382213
Phone No.: +91-2717-294083

E-mail: info@neoplastindia.com | Web: www.neoplastindia.com