

Technical Information for PREPMAX System

The **PREPMAX** system from TROESTER-ESI is a combination of proven, individual components from TROESTER Machinery, Ltd. and ESI Extrusion Services, Inc.

The system comprises of an extruder, a gear pump, a die-face cutter and a sophisticated control system, tying everything together.



(The picture shows our laboratory set-up with individual control panels for each machine as well as individual base frames for each component. This combination was designed to provide the flexibility needed to perform lab trials at our facility and is not indicative of a conventional set-up. A typical configuration would be made up of a much shorter extruder, common base frame and one central control panel.)

The individual components can be mixed and matched, depending on the customer requirements.

That means the extruder can either be a standard cold-feed extruder with a smooth barrel or a vacuum extruder to extract volatiles from hygroscopic compounds or even a pin-type extruder to process hard, demanding compounds like natural rubber.

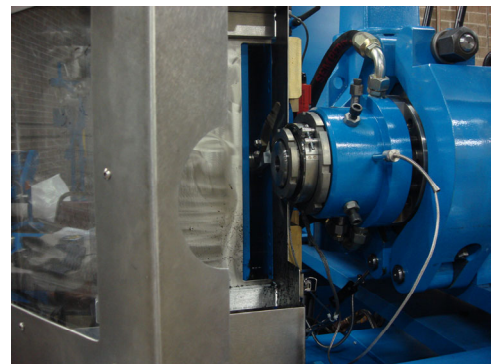
The extruder size (from 60 mm to 120 mm / 2 1/2" to 4 1/2") will be selected depending on the required output at a given temperature limit.

The extruder length is determined by the plasticizing requirements of the compound being processed. From a short 8:1 L/D ratio to a long 20:1 L/D ratio, all combinations are possible.

TROESTER's expertise in processing every rubber compound known, gives you the assurance of highest quality extrudates and highest throughput at the lowest temperature.

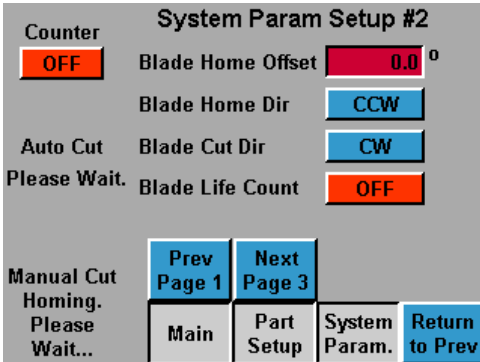
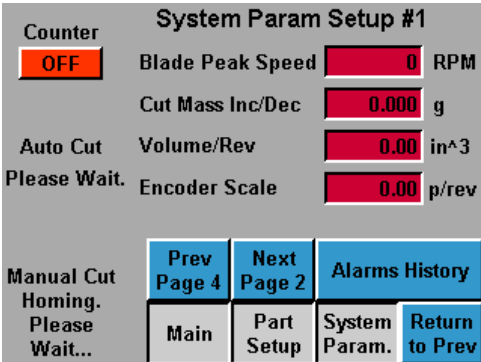
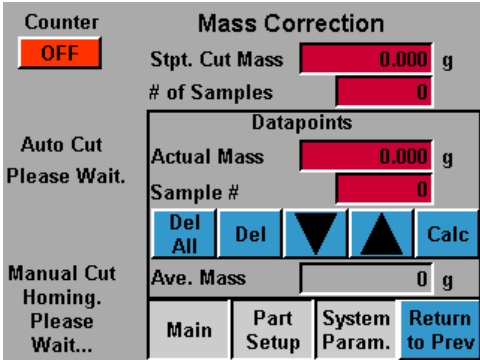
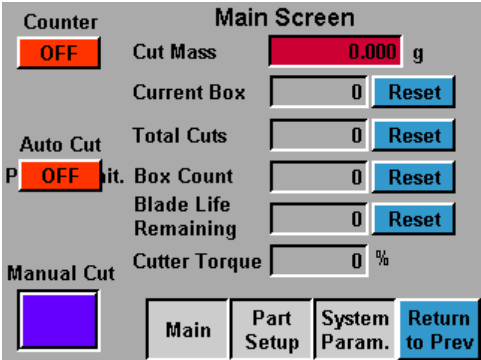
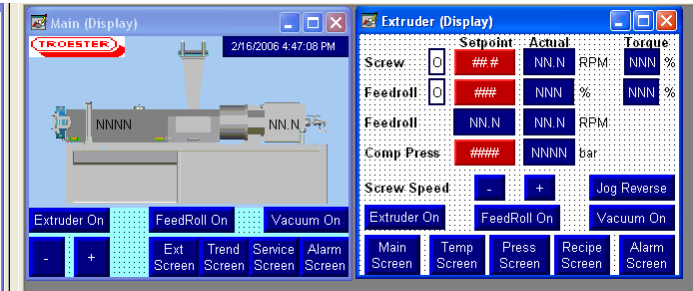
The gear pump size (from 56/35 to 120/80) will also be selected depending on the required output of the system.

TROESTER's expertise in gear pump technology and the manufacturing of all pump parts using the latest materials and coatings, gives you the assurance of high durability and wear resistance at extremely constant throughput. TROESTER develops and designs its own gear pumps and gear extruders and depending on the application will use straight gears, helical gears or herringbone gears.



ESI's precision cutting expertise and in-house, state-of-the-art, control programming capabilities provide a die-face cutting system designed to minimize part deformation and deliver high-quality parts with smooth cut surfaces. ESI's wide range of die-face cutters provides the ability to optimize the cutter set-up based on application variables such as part size, cut speed, required torque, etc.

The controls are a very important part of such a system, tying everything together and giving the operator an easy interface to work with and adjust the machine. All functions of the individual components are controlled through a touch screen interface. Recipe management is integrated to allow fast set-up for different parts. Optional integration of a weigh scale for auto-correction of part weight is available in addition to the manual entry of check weights.



Combining all the class-leading components (extruder, gear pump, die-face cutter and controls), results in the ultimate system for making very high precision mold preforms.

Depending on compound, part size, cut speed and cut weight, our system is capable of achieving weight tolerances between +/- 0.2 % to +/- 1.5%.

Please contact us with your specific application in order for us to provide you both with a price and performance data.

Advantages of the PREPMAX system

- Most flexible system on the market. Can be adjusted to a multitude of applications.
- Extremely accurate die blank cutting.
- Class-leading individual components for the accurate processing of a wide range of elastomeric polymers.
- Manufactured, sold and serviced from our facilities in Ohio.
- Cold-feed system (i.e. no mills)
- Continuous system (i.e. no start-up and end-of-run scrap for every batch).
- Full, production scale system available for customer trials available at our lab in Ohio.

Please contact us for further information, to schedule a demonstration or trial or to request a quotation for a specific application.

For less stringent application requirements, TROESTER-ESI also offers the SLUGMAX perform system.

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