



# **Laboratory Mono-Filament Machine**









The MX-F116 monofilament extrusion line is engineered for the high-efficiency production of premium-quality synthetic monofilaments from a variety of polymers such as PLA-ABS- PET- PA-PS-HIPS. Designed for precision and durability, this machine ensures consistent diameter control, excellent tensile strength, and optimal molecular orientation of the filaments.





Designed for testing and developing production of standard filaments, with a Die Head Nozzle 1.3: 3 mm.



#### **Water Bath**

The water path cools the filament after the extruder process and before reaching the spooler. It includes speed control system for consistent and stable operation.



#### **Thickness Measurement**

Contactless laser thickness measurement and control system with advanced software to ensure perfect roundness and optimum dimensional accuracy



#### **Spooler**

The spooler allows winding the extruded filament and also defines the filament diameter by adapting the speed of puller wheels.

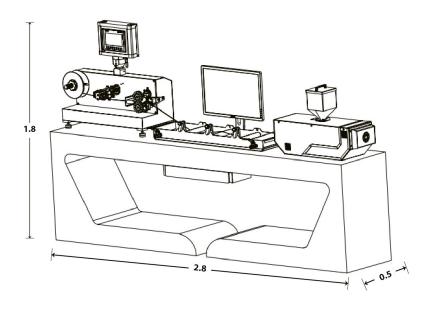


The air bath cools the extruded filament with adjustable airflow, ensuring gradual cooling, dimensional stability, reduced internal stress, and consistent roundness.



## **Technical Specifications**

| Model              | MX-F116                             |                        |
|--------------------|-------------------------------------|------------------------|
| Machine Type       | Laboratory Mono Filament Machine    |                        |
| Resin Type         | PLA, ABS, HIPS, PS, PETG, PA and PP |                        |
| Filament Diameter  | 1.75 mm                             |                        |
| Extrusion Capacity | 4 Kg/hr. (with PLA)                 |                        |
| Extruder           | Size                                | 16 mm standard screw   |
|                    | Design                              | Universal screw design |
| Die Head           | Nozzle with 1.3:3 mm hole           |                        |
| Cooling System     | Туре                                | Air bath / Water bath  |
| Spooler            | Spooler diameter                    | 200 mm                 |
|                    | Spooler width                       | 62 mm                  |
|                    | Motor drive                         | Stepper motor          |
|                    | Speed                               | 3 m/min                |
| Total Power        | 3 kW                                |                        |
| Dimensions         | Length                              | 2800 mm                |
|                    | Width                               | 500 mm                 |
|                    | Height                              | 1800 mm                |



Dimensions in meter



### **CONTACT US**

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