



## ACS Material Equipment Series

# RheoPro™ Micro Injection Molding Machine

**Contact Information:**

ACS Material, LLC

Address: 959 E Walnut St., Suite 100

Pasadena, CA 91106, USA

Phone: (866)-227-0656

Fax: (781)-518-0284

E-Mail: [contact@acsmaterial.com](mailto:contact@acsmaterial.com)

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## Product Overview

This specialized instrument is designed for polymer experimentation, focusing on the injection molding of dumbbell spline specimens using both common plastics and engineering plastics.



## Product Features

1. Micro-design: Enables the injection molding of 5~15g of raw materials in a single use.
2. Temperature: 50~350°C, Temperature accuracy:  $\pm 0.5^{\circ}\text{C}$ .
3. Heating zone: 2 zone.
4. Max Injection Force: 2T (compared to pneumatic injection molding, this system provides greater and more stable pressure).
5. Mold: Customizable, made of imported tool steel with processing accuracy:  $\pm 0.01\text{mm}$ .
6. Treatment: Tempering treatment: HB280~320, mold cavity mirror polishing, vacuum quenching.
7. PLC touch screen control: Easy to set operation, capable of storing multiple processing parameters.
8. Small size: 360\*500\*960mm, suitable for use on test benches and ventilation windows.

## Product Specifications

Product Name	RheoPro™ Micro Injection Molding Machine
SKU#	ERMIM001
Injection Volume	12ml (Max), can inject a variety of national standard, American standard spline mold including 150mm stretch spline
Injection Pressure	2T (Max)
Syringe Diameter	Φ15 mm
Syringe Material	S136
Injection Drive Mode	Motor Drive
Motor Power	2 kW
Temperature Control Zone	2 Zones
Maximum Temperature	350°C
Temperature Control Accuracy	±0.5°C
Temperature Control Power	Injection Cylinder Area: 250W Template Area: 850 W
Heating Injection Nozzle Rate	≤8 min (From room temperature to 350°C)
Heating Power	Mold are 500W, Injection Cylinder Area 220W
Customization	Injection cylinder can be customized from Φ12-15 mm according to the experimental raw materials
Interface	PLC Touch Screen Control with 7 inches screen
Power Supply	220 V, 5 A, 50 HZ
Weight	80kg
Dimensions	360*500*960mm

## Application Fields

1. Production of Splines: Capable of producing splines from a wide range of thermoplastic polymer materials, including but not limited to polyimide, PEEK, polyphenylene sulfide, PLA, PA, polycarbonate, etc.

2. Enhanced Material Options: Ability to incorporate additional materials such as magnetic powder, ceramic powder, graphene, polytetrafluoroethylene powder, metal powder, short glass fiber powder, with the potential to achieve nanometer-level grades.

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