

TECHNICAL DATA SHEET

Extrova™ Film Drawing Machine

Lab-scale micro casting film machine · Precision casting · Tension-controlled winding · Two models



ACS Material Extrova™ Film Drawing Machine

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SECTION I

Product Overview

The Extrova™ Film Drawing Machine is a lab-scale micro casting film machine for polymer film R&D, combining precision casting with tension-controlled winding. It supports pilot film making and functional film research with a wide range of polymers, and is available in two models covering different film widths.

Applicable materials include PE, PP, TPE, PC, EVA, PVC, and composite materials.

SECTION II

Core Advantages

- **Precision casting** — high-performance film forming for consistent, representative samples
- **Multi-material** — supports a wide range of polymers and composite materials
- **Servo drive** — independent servo-driven rollers for stable, repeatable operation
- **Tension winding** — tension-controlled take-up for stable film winding
- **Smart control** — 7-inch PLC touch screen interface
- **Two models** — ERFMD-35 and ERFMD-50 cover different film widths

SECTION III

Specifications

Model comparison

Model	Film width
ERFMD-35	30–35 mm
ERFMD-50	35–50 mm

Common parameters

Extrova™ Film Drawing Machine	
Film thickness	0.1–0.6 mm
Production speed	100–500 mm/min
Roller drive	Servo motor
Winding	Tension-controlled
Control interface	7-inch PLC touch screen
Power supply	220 V, 50 Hz
Dimensions	720 × 430 × 500 mm

SECTION IV

Casting Film Process

A typical casting film run proceeds through five stages:

- 01 Receive polymer melt
- 02 Casting roller forming
- 03 Stable haul-off guiding
- 04 Tension winding
- 05 Thickness uniformity check

SECTION V

Applications

Typical applications for the Extrova™ Film Drawing Machine include:

- **Functional film preparation** — prepare functional film samples for evaluation
- **Film performance R&D** — study how formulation and process affect film performance
- **Material structure R&D** — investigate material structure in cast film form
- **Formulation screening** — compare candidate formulations at lab scale
- **New material validation** — validate new polymers and composites before scale-up
- **Lab pilot film making** — produce pilot films for downstream testing

Product value: lower film-testing cost, better film consistency, shorter R&D cycles, and support for functional film R&D.

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