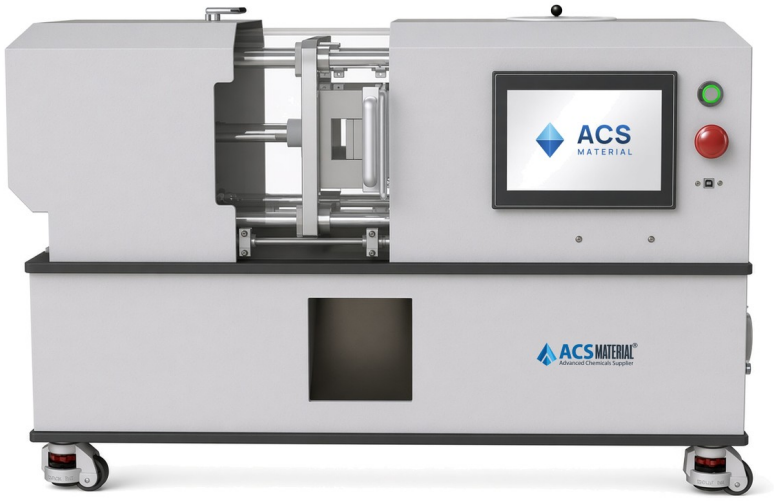
TECHNICAL DATA SHEET

Polytevo Series Benchtop Mini Extruder

Benchtop mini extruder · 20 mm screw, L/D 9:1 · 1–150 rpm servo drive · 30 kN clamping · up to 400℃



Polytevo Series Benchtop Mini Extruder (ACS-7103E) — representative configuration

The Polytevo Series Benchtop Mini Extruder (ACS-7103E) is a compact benchtop extrusion system with servo drive and PLC-controlled mold clamping. Image shown for reference; final configuration is confirmed in the quotation.

CONTENTS

01 Product Overview

02 Core Advantages

03 Specifications

04 Applications

ACS MATERIAL, LLC

959 E Walnut St., Suite 100

Pasadena, CA 91106, USA

Phone +1 (866) 227-0656

Fax +1 (781) 518-0284

contact@acsmaterial.com

Revision Date **11/13/2026**

SECTION I

Product Overview

Polytevo Series Benchtop Mini Extruder (ACS-7103E) is a compact benchtop extrusion system with a 20 mm screw (L/D 9:1), a servo-driven screw speed of 1–150 rpm, a PLC-controlled mold clamping system with 30 kN clamping force and a maximum temperature of 400℃.

The ACS-7103E is designed for compounding new materials and producing small-batch extruded specimens. It integrates a mechanical frame, a melt injection assembly, a mold clamping mechanism and a heating control system, and its barrel and screw are nitrided for extended service life. It is intended for R&D and teaching laboratories where material savings, a compact footprint and portability matter.

SECTION II

Core Advantages

— **Compact and portable** Small footprint for easy relocation; miniature molds reduce space requirements and production costs.

— **PLC-controlled clamping** The mold clamping system is PLC-controlled; 30 kN clamping force from a servo motor and a maximum mold stroke of 100 mm.

— **HMI touch screen** Touch screen operation of the PLC controller.

— **Fully electric servo drive** Servo motor drive with wide-range screw speed adjustment (1–150 rpm) and stable operation.

— **PLC temperature and speed control** The PLC control system displays and regulates temperature, speed and other process parameters.

— **Nitrided barrel and screw** The 38CrMoAlA barrel and screw are nitride-treated for extended service life.

SECTION III

Specifications

Technical data — ACS-7103E

Specifications	
Parameter	**Specification**
Brand	Polytevo Series by ACS Material
Product Name	Polytevo Series Benchtop Mini Extruder
Model	ACS-7103E
SKU #	ERP7BME1
Product type	Laboratory benchtop extrusion molding system
Screw diameter	20 mm
L/D ratio	9:1
Screw material	38CrMoAlA, nitride-treated
Barrel material	38CrMoAlA, nitride-treated
Screw torque	22 N·m
Screw speed	1–150 rpm (servo motor)
Clamping force	30 kN (servo motor)
Max. mold stroke	100 mm
Power supply	AC 220 V, 50 Hz
Motor power	Melt motor: 400 W + clamping motor: 750 W
Heating power	680 W
Maximum temperature	400℃
Temperature accuracy	±0.5℃
Touch screen	Fitted
Dimensions (L × W × H)	950 × 470 × 600 mm
Weight	165 kg

Scope of delivery

— **Standard configuration:** the ACS-7103E benchtop extrusion system.

— **Scope of supply** — molds, accessories and scope of supply are confirmed in the quotation.

SECTION IV

Applications

For R&D and teaching laboratories that compound new materials and produce small-batch extruded specimens.

Product value: a portable benchtop extrusion system with a 20 mm servo-driven screw, 30 kN PLC-controlled clamping and up to 400℃.

Revision Date: 11/13/2026

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