ETP1
LAB EXTRUDER

With Positive Material Ingestion, Easy Feeding & Maximum Versatility

SUITABLE FOR POWDERS, CLAY, MASTICS, CATALYSTS, FOOD STUFF & MORE

QUICK RELEASE COMPONENTS MEAN REDUCED TIME BETWEEN TRIALS

EFFORTLESS PROCESSING WITH TEMPERATURE & PRESSURE CONTROLS

MAKE YOUR TRIALS FULLY SCALABLE USING THE BONNOT SCALE UP MODEL FOR PRODUCTION MACHINES

EASY TO USE & INTUITIVE TOUCH SCREEN CONTROLS

ENGINEERED TO MEET & EXCEED PEAK LOAD SPECIFICATIONS
DESCRIPTION

The Bonnot ETP 1 Lab Extruder provides positive material ingestion and easy feeding with our popular twin packer design; along with quick release components reducing time between trials. The ETP 1 comes equipped with easy to use, intuitive touch screen controls to effortlessly process countless materials like powders, clays, mastics, catalysts, foodstuff and much more. The ETP 1 is small and compact, but is still robust to handle the toughest processing challenges. The ETP 1 has great standard technical features, but Bonnot can always customize the machine to fit specific needs; such as higher L/D ratio, higher RPM, higher torque, and countless screw geometries. One of the best attributes of the ETP 1 Lab Extruder is its scalability so our customers can mitigate risk as they commercialize new products and processes.

FEATURES & BENEFITS

- **COMPACT & PORTABLE**
- **HIGH TORQUE CAPACITY** 760 In-lb
- **BEARING ISOLATION** from Hopper
- **TWIN PACKERS** for Positive Material Ingestion & Easy Feeding
- **BALL BEARINGS INSTEAD OF BUSHINGS** for Long Life
- **PORT** to Monitor Metal Temperature of Barrel
- **PORT** for Pressure and/or Melt Temperature Probe
- **JACKETED BARREL** for Liquid Heating or Cooling
- **QUICK & EASY DISASSEMBLY** for Cleaning
- **STAINLESS STEEL CONTACT COMPONENTS** for Food & Catalyst Applications
GENERAL ARRANGEMENT

- MOTOR POWER RECEPTACLE
- WATER JACKET OUTLET (1/4" NPT)
- WATER JACKET INLET (1/4" NPT)
- METAL THERMOCOUPLE WELL
- PRESSURE TRANSDUCER / MELT THERMOCOUPLE (see B.O.M. for model if furnished)
- BARREL PIN (6X) A.K.A. mixing pin
- HMI TOUCHSCREEN MODULE (9.5" (241mm) diagonal screen size)
- EMERGENCY STOP
- MAIN DISCONNECT
- THERMOCOUPLE RECEPTACLE (X2)
- CORD TO PRESSURE TRANSDUCER
- ALLEN BRADLEY POWERFLEX 525 AC DRIVE

Dimensions:
- 20.86in [530mm] horizontal
- 5.64in [143mm] vertical
- 18.50in [470mm] vertical
ETP1 TECHNICAL SPECIFICATIONS

**Screw Size:** 1” (25.4mm), 6:1 L/D  
**Power:** 1/2 HP (0.37kW), 760 IN-LB (85.9 Nm)  
**Max Current:** 1.9 AMPS (@230V to Motor)  
**Voltage:** 120V, Single Phase, 230V, 3 Phase to Motor  
**Frequency:** 50Hz or 60Hz Input, 60Hz Output  
**Max Screw Speed:** 41 RPM  
**Software:** Connected Components Workbench  
**M.O.C.:** 304 SS Hopper, 17-4PH SS Auger and Packers

**Volumetric Capacity of Screw:** 4.13 IN³ (67.7 CC)  
**Min. Batch Size:** 140g or 0.31lbs (assuming 1g/cc)  
**Motor Service Factor:** 2.1  
**Max. Operating Pressure:** 4000 PSI (276 Bar)  
**Machine Measurements:** L 20.86” (530mm)/ W 16.54” (430mm)/ H 22.11” (561mm)  
**Weight:** Extruder - 80lbs (36kg), Controls Cabinet - 58lbs (26kg) (can be moved independently)  
**Controls Cabinet Enclosure Rating:** NEMA 1

*Equipment can be provided CE compliant.*  
*Equipment can be supplied with forming die plates upon request.*