Starting out at $85k, these systems feature a virgin PTFE wiper basket inside of a six-inch 316 Stainless Steel evaporator body. Heat is provided via four (4) electronic heat bands which are precisely controlled by a single, commonly mounted PID for full temperature control without the use of expensive, dangerous heating oils.

Feed is provided by a jacketed feed tank, which is also heated via electronic heat controlled by a separate temperature controller for precise input feed temperature. The unit can perform volatile stripping at a rate of 6 kilograms (kg) per hour utilizing the included "cone-bottom" condenser replacement. For high boiling point, short path distillation, the unit features a high-surface area, removable inner condensation coil that can perform at 2-4 kg per hour feed rates.

Precise vacuum monitoring and analytics are provided by the LS-PVM-1BT, a bluetooth-capable and EliteLab compatible vacuum gauge mounted to the rear of the high-surface area, baffled AuxiliaryCondenser/Cold trap also constructed of Stainless Steel.

Single Stage TFD Features:
- Approx. 6 kg/hour Input Feed Capability for Volatile Stripping
- Approx. 2-4 kg/hour Input Feed Capability for Cutting and Polishing Main Body
- 0.25 m² Short Path Evaporator (1)
- Virgin PTFE Wiper Blades with 316 SS Wiper Cage
- Removable Hybrid Still Cold Finger
- Manual Inlet Feed Tank with Heater/PID
- Electric Heat Bands (4) with PID Control Box
- Precision Vacuum Gauge
- Baffled Cold Trap with Receiver (Dry Ice/LN2)
- Manual Valves
- 80/20 Common Frame with Wheels
- 316 Stainless Steel Construction

HVE Single Stage TFD
Lab Society has partnered with High Velocity Extractors (HVE) to bring a Single Stage Distillation unit system to the industry to address growing production demands while keeping in mind budgetary constraints. Utilizing Stainless Steel Thin Film Distillation technology, HVE has designed a 0.25 m² short path distillation evaporator that outperforms any other unit in its price class.
Thin Film Distillation System Information:

**System Specifications**

**Electrical:**
- 6400 Watts @ 240V (30 amps max) - Evaporator Heater
- 600 Watts @ 120V (5 amps max) - Feed Tank Heater
- 180 Watts @ 120V (1.5 amps max) - Main Motor

*Additional wattage for vacuum pump & chiller/heater not included*

**Footprint of Common Frame:**
- Depth: 27 Inches (685.8mm)
- Width: 45 Inches (1143mm) + 12 Inches Per Shelf [2 included]
- Height: 84 Inches (2133.6mm)

*Additional footprint for shelves, pumps, chillers/heaters not included*

**System Requirements (Not Included)**

- **High Vacuum Pump**
  - 10-30 Cubic Feet per Minute (CFM)
  - Minimum 30 mTorr/micron Ultimate Vacuum Rating
  - Ex. CRVpro16, CRVpro24, CRVpro30 with Exhaust Filter

- **Chiller/Heater for Inner Coil Condenser:**
  - Minimum 0 - 75 Celsius temperature range
  - Higher max. temp. between 100C to 200C for Hot Condenser Applications
  - Minimum 500 Watts for Cooling at 20C
  - 1000 watts @ 20C for Improved Performance

- **Cold Trap Requirements:**
  - Manual Chilling: Dry Ice + Isopropanol/Acetone for Chilling, Liquid Nitrogen (LN2)
  - Mechanical Chilling: Polyscience IP-80 with 1.75" Rigid Coil
  - Optional Additional Cold Trap: T80 with KF25 Stainless Steel Insert

**Training Options Available Upon Request:**
- 1-Day Lab Society Thin Film Distillation Install & Training* - $3000
- 2-Day Lab Society Thin Film Distillation Install & Training* - $6000

*All System requirements must be present on-site prior to arrival, including electrical connection, vacuum pump, chiller/heater, & cold trap coolant*