

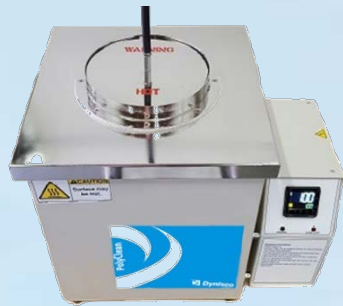


*From lab to production,
providing a window into the process*



Dynisco PolyClean Fluidized Temperature Bath

Dynisco PolyClean Fluidized Bath



Dynisco's PolyClean is a fluidized temperature bath that will clean parts and tooling 2 to 3 times faster and safer than traditional cleaning method, such as an oven. Our fluidized bath system is air-controlled with advanced PID temperature controller for optimal thermal performance. The system uses aluminum oxide sand (heated up to 1112°F) and air to surround the part or tooling. The “sand” will gently breakdown the polymer without damaging the part or tooling.

Typical cleaning processes

- Oven:
 - Limited number of parts, long process
- Torching:
 - Damages tooling, Labor intensive, operator safety concerns
- Bead & Ice Blasting:
 - High consumable cost, cleans exterior only
- Manually:
 - Labor intensive, damages tooling



PolyClean- How does it work?

The tank is filled with Aluminum oxide sand



This flowing motion causing the dry sand to act like a fluid is called Fluidization

The Fluidized Aluminum Oxide (Sand) at High Temperatures is a stable way to maintain heat without damaging critical dimensional tolerances

PolyClean- Sensors Cleaning Process



Polyclean – Before & After Pictures of Screen Changer



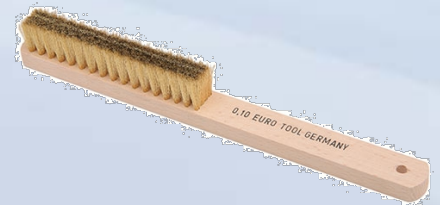
Cleaning Time – Removes ash and/or sand

- Dies, Breaker Plates, Screen Packs, Capillaries, Dies = 50 to 60 min
- Pressure Transducers= 8min
- Fast Turnaround



Cleaning Supplies – To remove ash and/or sand

- Clean with shop air
- Scotch Brite Pads
- Wire Brush
- Sand not degradable, but replace 4 to 6 months



Material Burn Off Temp Guide

- Nylon 450°C/842°F
- Paint 475-575°C/887-1067°F
- Styrene 450°C/842°F
- Polyethylene 425-450°C/797-842°F
- Polypropylene 425-500°C/797-932°F
- Fluoropolymers 525°C/975°F
- PTFE 500°C/932°F
- PVC 460-540°C/860-1004°F
- High density polythene 450°C/842°F
- PEEK 500-525°C/932-977°F
- Silicone Rubber 535°C/995°F
- Polyesters 450°C/842°F
- Ethylene methacrylic 450-480°C/842-896°F
- Polyurethane 440-450°C/824-842°F
- Polystyrene 450°C/842°F
- Rubber debonding 350°C/662°F
- Polycarbonate 400-425°C/752-797 °F
- Organic matter oil/grease 300-500°C/572-932 °F
- Crosslink PE 400°C/750°F

PolyClean Models (Sizes)



- **PolyClean Model 6L:** The PolyClean 6" Fluidized Temperature Bath can be used to clean small tooling from Laboratory Extruders or Injection molding machines, Capillary Rheometer and Melt Flow Indexer dies or other small components used in polymer testing or small part production. 5.3" X 6" Deep (134mm X 152mm)



- **PolyClean Model 12L:** The PolyClean 12" Fluidized Temperature Bath can be used to clean tooling from all extrusion, injection molding, blow molding, and laboratory applications. Its 12" deep basket is designed to handle a large variety of components from laboratory as well as production environments. The 12L can also be configured with its sensor support tray allowing (2) pressure sensors to be cleaned at a single time. 10" X 12" deep (8.4" diameter when using parts basket) and (213mm X 305mm)

Polyclean Model (Sizes)



- **PolyClean Model 26L:** The PolyClean **26**” The PolyClean 26” Fluidized Temperature Bath can be used to clean tooling from all extrusion, injection molding, blow molding, and laboratory applications. Its 26” deep basket is designed to handle a large variety of components from laboratory as well as production environments. 10” X 12” deep (8.4” diameter when using parts basket) and (213mm X 305mm)

Air Exhaust System

- Exhaust System not required if the installation site has a fume exhaust hood present
- Dynisco sells Standard Air Exhaust System

