

Industrial Cleaning/ Fluidized Baths



FFB50 Series



- ✓ Clean Extrusion and Injection Molding Tooling
- ✓ Fast Cleaning:
 - Minimizes Costly Production Equipment Down-Time
 - Reduces Any Impact on Hardness of Material; Cleans in One-Third the Time of Ovens
- ✓ No Tool Damage as Compared to Using Ovens, Torches, Wire Brushes, and Scraping
- ✓ Unattended Cleaning Reduces Labor Costs vs. Using Manual Cleaning Methods
- ✓ Typical ROI in 6 to 9 Months
- ✓ Not Abrasive to the Tooling
- ✓ Easily Burns Off Material in the Small Holes of Breaker Plates, Dies, Nozzles and Other Tooling
- ✓ Well Insulated, Built-to-Last and Energy Efficient (25 kWh Typical FFB52 Run)
- ✓ No Need for Consumables, Solvents or Any Other Chemicals
- ✓ Removes Most All Polymers from Tooling

Applications:

- ✓ Tempering
- ✓ Annealing
- ✓ Nitriding
- ✓ Distillation
- ✓ Curing
- ✓ Exothermic and Endothermic Reactions
- ✓ Thermal Analysis of Devices, Components and Materials



FFB51 shown smaller than actual size.

FFB51 and FFB52 industrial fluidized baths are our most popular units due to their economical price and smaller size. They offer a front panel mounted rotameter for adjustment of the fluidizing air flow and are ready for use out of the box with the included charge of aluminum oxide.

For years, plastic manufacturers have come to depend on industrial fluidized baths (FFB series) for safe, efficient and cost effective cleaning of tooling, components, systems and parts (i.e. dies, breaker plates, nozzles, tools, tips, spinnerets, extruder screws, manifolds, etc.) The FFB Series will remove almost all polymers, including plastic, paint, epoxy, rubber and adhesives, as well as other hydrocarbon-based products such as oils, fluids, grease, lubricants and coatings.

Parts immersed into the FFB series are cleaned by the high

temperature (up to 600°C) environment within a bath media of fluidized aluminum oxide that instantly starts to degrade plastic to carbon, which then leaves the bath as CO₂. This instant heating and minimized quenching gives shorter cleaning times than with conventional ovens, and with the even and consistent heat of the bath, results in greatly reduced metal fatigue and tool damage. TRODEX baths can be fluidized with either compressed house air or an inert gas such as nitrogen or argon. It should be noted that fluidized baths and the action created in the aluminum oxide are not abrasive to items immersed for normal cleaning or heat treatment times. Typical cleaning times range from 30 minutes to 2 hours depending on bath loading, temperature and amount of material to be cleaned.

The excellent thermal performances the FFB series make them a good choice for basic heat treatment, test and calibration as well as reactive analysis.



FFB51 SPECIFICATIONS

Dimensions:

Overall External:

518 L x 518 W x 675 mm H
(20.4 x 20.4 x 26.6")

Bath Internal:

255 diameter x 405 mm deep
(10.1 x 16")

Working Volume:

255 diameter x 305 mm deep
(10.1 x 12") (8.4" diameter when
using parts basket)

Temperature Range: 50 to 600°C
(122 to 1112°F)

Temperature Stability: $\pm 1.0^{\circ}\text{C}$
(8" immersion depth, with lid on
after 2 hrs controlling at set point)

Display Accuracy: $\pm 10.0^{\circ}\text{C}$
(8" immersion depth, with lid on
after 2 hrs controlling at set point)

Heat Up Time*:

Ambient to 300°C: 0.8 hrs

Ambient to 450°C: 1.75 hrs

Ambient to 600°C: 2.5 hrs

Air Supply: Clean, dry and oil free
air, at a constant pressure of 30 psi,
using a minimum ID air line of ½ inch
(air flow adjustment is necessary
when changing temperatures)

Fluidizing Bed Medium: Aluminum
oxide 120 mesh 85 lb

Electrical Requirements: 240V,
1 phase, 60 Hz, 4 kW

Exhaust Fan Requirements:
7125 1/min (250 ft³/min) at 5 in WG

Gross Weight: 97.5 kg (215 lb)

Net Weight:

FFB51: 59 kg (130 lb)

Aluminum Oxide: 38.5 kg (85 lb)

FFB52 SPECIFICATIONS

Dimensions:

Overall External:

518 L x 602 W x 1049 mm H
(20.4 x 203.7 x 41.3")

Bath Internal:

255 diameter x 762 mm deep
(10.1 x 30")

Working Volume:

255 diameter x 660 mm deep
(10.1 x 26") (8.4" diameter when
using parts basket)

Temperature Range: 50 to 600°C
(122 to 1112°F)

Temperature Stability: $\pm 1.0^{\circ}\text{C}$
(18" immersion depth, with lid on
after 2 hrs controlling at set point)

Display Accuracy: $\pm 10.0^{\circ}\text{C}$
(18" immersion depth, with lid on
after 2 hrs controlling at set point)

Heat Up Time*:

Ambient to 300°C: 2 hrs

Ambient to 450°C: 3.5 hrs

Ambient to 600°C: 5 hrs

Air Supply: Clean, dry and oil free
air, at a constant pressure of 30 psi,
using a minimum ID air line of ½ inch
(air flow adjustment is necessary
when changing temperatures)

Fluidizing Bed Medium: Aluminum
oxide 120 mesh 160 lb

Electrical Requirements: 240V,
1 phase, 60 Hz, 6 kW

Exhaust Fan Requirements:
7125 1/min (250 ft³/min) at 5 in WG

Gross Weight: 156 kg (345 lb)

Net Weight:

FFB52: 84 kg (185 lb)

Aluminum Oxide: 72.5 kg (160 lb)

** Indicated heat up time applies for a well
fluidized bed with a lid on and extraction
fan off.*

To Order	
Model No.	Description
FFB51	Industrial fluidized bath calibrator 4 kW
FFB52	Industrial fluidized bath calibrator 6 kW

Accessories

Model No.	Description
7031103	Standard size parts basket for FFB51
7031102	Deep size parts basket for use with extraction collar, model number 6036157 for FFB51
7031658	Standard size parts basket for FFB52
7031659	Deep size parts basket for use with extraction collar, model number 6036157 for FFB52
6036157	Fume extracton collar
6036156	Insulated retort lid
7031154	CN-100 cyclone, for collection of aluminum oxide from the exhaust system
7030771	Extraction fan 115/230V, single-phase, 250 CFM
7032838	200 to 230V boost transformer, 7.2 kVA