TECHNE

INDUSTRIAL FLUIDISED BATH EQUIPMENT

clean extruder parts safely & efficiently

Techne industrial cleaning baths

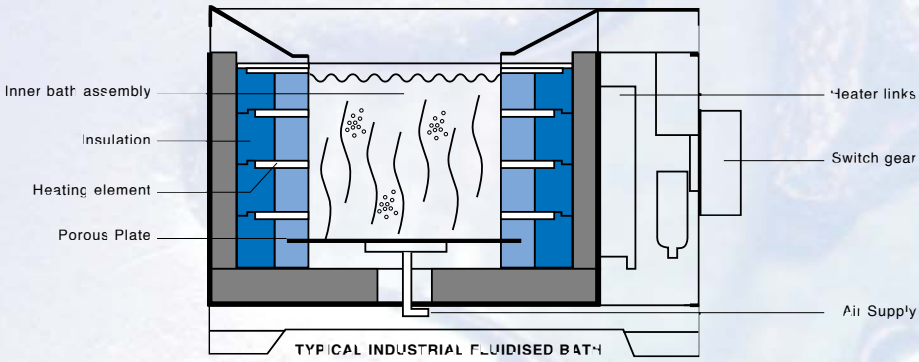
Modern plastic producers spend ever-increasing amounts of money on more and more complicated tooling which still has to be cleaned to maintain product quality. Techne approached this problem some years ago and now have a range of equipment designed to remove unwanted material from production hardware without damage to the part(s) being cleaned.

The Fluidised Bath is a thermal process that degrades plastic residues to carbon and comes away from the bath as CO_2.

This fast cleaning process enable costly machinery to be put back into production with the minimum delay.

Baths operate from a factory air supply or if required inert gases such as nitrogen, full range of fume treatment apparatus is available.

Extruder parts before and after cleaning in a Techne Industrial Fluidised Bath



BURN-OFF FLUIDISED BATHS

A fluidised bath consists of a loosely packed mass of solid particles through which an upward flow of air is passed. In this fluidised state the particles become mobile, and the bath as a whole displays many of the properties of a liquid. However, since the bath is composed of tiny inert aluminium oxide particles, freezing, boiling and evaporating are totally eliminated. These advantages make fluidised baths a very attractive, pollution free, safe alternative to oil, salt and molten metal baths.

Techne produce rugged units for the plastics, paint, rubber and associated industries. These industrial fluidised baths are ideal for cleaning residual plastic material from dies, breaker plates, spinnerretes, etc. They are also widely used for removing epoxy powder paint coatings and for reclaiming painted, coated and bonded components.

Fast: Most parts are thoroughly cleaned in 20-30 minutes.

Temperature range: 50°C - 600°C

No damage to expensive parts: The non-abrasive, non-corrosive medium eliminates the wear and damage so often caused by manual cleaning. Uniform bath temperature prevents distortion.

Safe: Dry, inert medium.

Labour free: The cleaning process is entirely automatic.

Reliable: Heavy stainless steel construction with external heaters for long continuous service.

Construction: Rugged stainless steel inner container and porous plate for heavy industrial use. Protected controls

Fume extraction: All units are available with peripheral fume extraction systems to ensure the safe removal of combustion products whilst maintaining access to the bath. Heavy duty stainless steel mesh baskets are available.

Auto air units come complete with an automatic air adjustment system and flowmeter for visual monitoring of the airflow through the bath see ordering information.

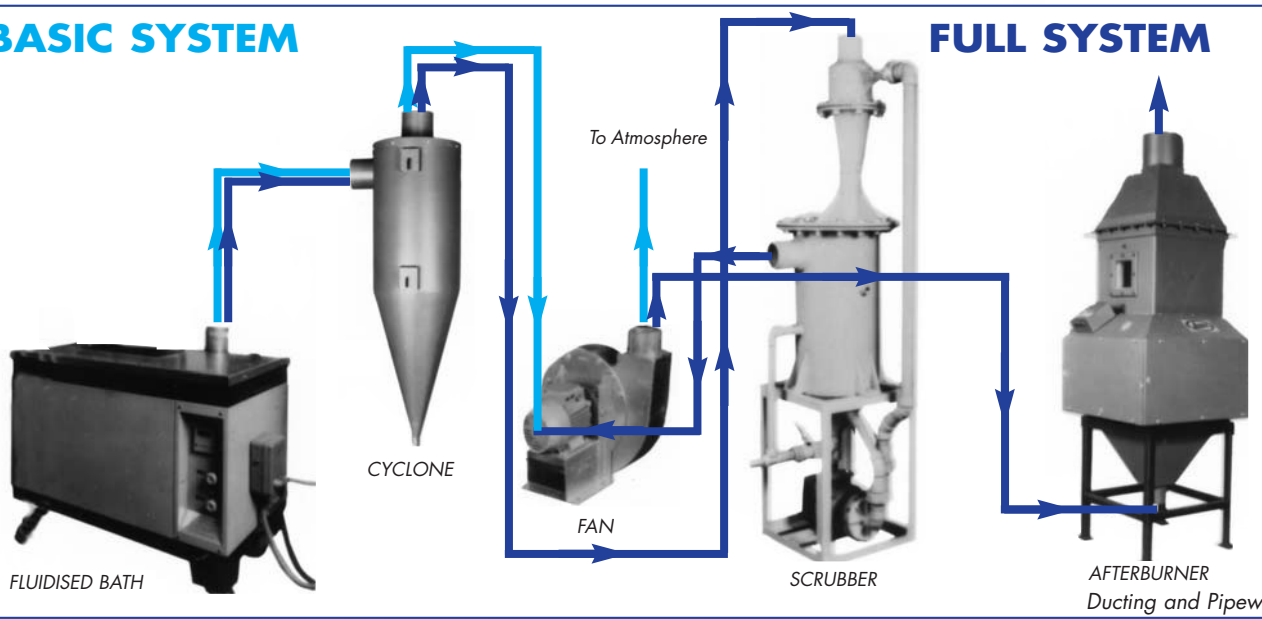
A SELECTION OF TECHNE FLUIDISED BATHS & ANCILLARY EQUIPMENT

IFB–111

IFB–101

BASIC SYSTEM

FULL SYSTEM



Ducting and Pipework not supplied

FUME CLEANING

For those installations where it is desirable to have an independent system for cleaning fumes from the burn-off process and in order to assist customers in complying with local requirements for environmental pollution. Techne have developed three fume treatment systems.

AFTERBURNER

The system has been designed to eliminate virtually all visible smoke and fumes using a powerful flow-through burner operating from mains or bottled gas. No secondary fan is required for the combustion air.

Safe: Designed to comply with British Gas Council and most other regulations.Fail safe systems include ultra-violet flame detection and double solenoid control of inlet gas

Effective: Exhaust stack emission is in accordance with threshold limit values (TVL's) adopted by the American Conference of Governmental Industrial Hygienists (AGGIH) at its annual conference in 1976. In the UK these TVL's are reproduced in Guidance Note EH15/76 from the Health and Safety Executive.

Compact: Minimum amount of floor area required.

Economical: Gas is consumed only when the equipment is in use.

Quick to install: The free standing unit needs only to be connected to gas and mains electricity.

Serviceable: Service can be carried out easily by the user.

Easy to operate: The afterburner has few operator controls and is simple and easy to operate.

SCRUBBER

This powerful electrically driven unit prevents corrosive acids and other soluble noxious fumes (especially hydrochloric acid and harmful by-products of PVC and other halogenated polymers) from being emitted into the atmosphere.

Compact: Free standing unit with 100mm venturi.

Compatible: The scrubber is compatible with the afterburner and most Techne fluidised baths.

Serviceable: the unit is easily installed inside or out of doors, requiring only mains electricity and a convenient water supply. It can be easily serviced and maintained by the user.

Inexpensive: Only power requirement is to run the water recirculating pump.

Flexible: Optional caustic make-up tank with programmed or manual pH control. Water feed and discharge can also be manual or automatic.

CYCLONE

This efficient wall mounted unit can extract more than 99% of any fluidising medium that may be carried over into the bath exhaust system.

Safe: No moving parts

Economical: Requires no power, other than connector to extraction fan.

Efficient: Specially designed for optimum combination of air flow and pressure drop.

Flexible: Compatible with all Techne fluidised baths and fume cleaning equipment.

IFB–201

IFB–51

SPECIFICATION OF TECHNE IFB FLUIDISED BATHS

MODEL	IFB-51	IFB-101	IFB-111	IFB-121	IFB-131	IFB-201	IFB-500
Temperature range°C	50 to 600	50 to 600	50 to 600	50 to 600	50 to 600	50 to 600	50 to 600
Control stability at 450°C	±5	±5	±5	±5	±5	±5	±6
Internal working diameter mm Working depth mm	259 305	310 350	310 1000	450 700	450 1200	500 L 395 D 220 W	635 810
Loading capacity (litre)	5	9	25	37	64	12	86
Air supply pressure (kPa) (lb/in^2)	170-1030 25-150	170-1030 25-150	170-1030 25-150	170-1030 25-150	170-1030 25-150	204-1030 30-150	210-1030 30-150
Air consumption (litres/min) -maximum (at ambient) -at 450°C	 40 20	 120 60	 120 75	 300 150	 300 150	 220 150	 600 300
Power consumption kW	4	6	9	12	18	9	26
External dimensions mm Width x depth x height	521x521x686	795x625x915	1025x790x1670	1125x850x1335	1125x850x1835	1155x660x930	1500x1330x1665
Net weight (less alundum) kg	42	75	260	226	330	272	760
Alundum supplied with unit kg	40	50	150	200	300	60	450
Shipping weight (with Alundum) kg	88	167	470	497	894	377	1292
Electrical supply options (other optional available on request)	240v1PH 50HZ	240v1PH 380v3PH 415v3PH	380v3PH 415v3PH	380v3PH 415v3PH	380v3PH 415v3PH	200v3PH 220v3PH 380v3PH 415v3PH 480v3PH	380v3PH 415v3PH

ACCESSORIES

EXTRACTION FAN	F5243**	F5243*	F5243*	F5148	F5148	F5243*	F5148
CYCLONE	CN100**	CN-100*	CN-100*	CN-500	CN-500	CN-100*	2 X CN-500
AFTERBURNER	NOT AVAILABLE	AB-100	AB-100	AB-100	AB-100	AB-100	AB-500
SCRUBBER	NOT AVAILABLE	SR-100	SR-100	SR-100	SR-100	SR-100	SR-500
LID	F6156	F5967	F7998	F6425	F6425	STANDARD	POA
BASKET	FA624	F5976	F6224	F6426	F6427	FB201	F5207
FILTER/REGULATOR	F5915	F5915	F5915	F5915	F5915	F5915	F5915

*NOTE: IF AFTERBURNER IS USED FAN F5148 AND CYCLONE CN-500 SHOULD BE USED
** IF USED WITH CYCLNE AND FAN ORDER F6157 EXTENTION COLLAR FA625 DEEP BASKET

ORDERING INFORMATION

STANDARD UNITS	Part No	WITH AUTO AIR & FLOW METER
IFB-51	F951	not available
IFB-101	F952	F952AA
IFB-111	F956	F956AA
IFB-121	F957	F957AA
IFB-131	NOT AVAILABLE	F958
IFB-201	FIFB20	NOT AVAILABLE
IFB-500	F950	NOT AVAILABLE

(Note Electrical supply to be specified at time of ordering)

INTERCONNECTING PIPE WORK **NOT** SUPPLIED

Thank you for reading this data sheet.

For pricing or for further information, please contact us at our UK Office, using the details below.

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