



Electrostatic Technology, Inc.
A Subsidiary of Nordson Corporation

**CONVENTIONAL FLUIDIZED BED
MODEL CFB-64**

SERIAL NUMBER 17971

INSTALLATION & OPERATING MANUAL

SHIPPING

Sometimes equipment can be damaged in transit. An inspection of the shipping crate should be made upon delivery, and when equipment is removed, it should be carefully inspected to make sure the unit is in good condition. If the equipment is damaged, the carrier's claim agent should be requested to prepare a report, a copy of which should be sent to:

ELECTROSTATIC TECHNOLOGY, INC
A SUBSIDIARY OF NORDSON CORPORATION
4 PIN OAK DRIVE
BRANFORD, CT 06405

TELEPHONE: 203-488-8112

FAX: 203-483-8777

Electrostatic Technology, Inc will then advise concerning repairs and replacements.

AIR REQUIREMENT

A clean, oil free air supply capable of 0.566 m³/min (20 SCFM) @ 5.5 bar (80 psi) minimum, 6.9 bar (100 psi) maximum.

DESCRIPTION OF CONTROLS

CONTROL DESCRIPTION	FUNCTION
ON/OFF Valve	ON/OFF valve for main air supply from Customer plant to the fluidized bed chamber
Air Regulator w/Gauge	Used to adjust and regulate air pressure to the Fluidizing Bed
Needle Valve	Used to adjust air flow to the Fluidizing Bed

SET-UP

1. Place "Conventional Fluidized Bed" on a level surface at desired location.
2. Connect air supply line to Main Air Valve inlet fitting.

OPERATION

WARNING: Wear protective clothing, safety goggles, and approved respiratory protection. Failure to observe may result in serious injury.



1. Adjust all controls to minimal settings. All knobs are labeled increase/decrease.
2. Lift cover off Conventional Fluidized Bed and add a suitable conventional fluidizing powder to bed until $\frac{2}{3}$ full. **NOTE:** Do not completely fill because powder will overflow when fluidized.
3. Open the Main Air Valve.
4. Open Fluidized Bed Regulator until Fluidized Bed Gauge reads approximately 2.1 bar (30 psi).
5. Open Fluidized Bed Needle Valve until powder just begins to bubble.
6. Begin coating process. ETI recommends using a part holder or rack to prevent a part(s) from falling in the bed and damaging the porous plate.
7. Leave controls as adjusted and turn Conventional Fluidized Bed ON/OFF with Main Air Valve.

NOTE: Powder coating materials are hygroscopic. When not in use for more than an overnight period, remove the powder from the fluidizing bed to prevent clogging of the porous plate.

SAFETY



CAUTION: BEFORE DISCONNECTING MAIN AIR LINE TO FLUIDIZED BED BE SURE MAIN AIR HAS BEEN SHUT OFF. ALLOW ADEQUATE TIME FOR PRESSURE TO BLEED OFF BEFORE DISCONNECTING.



CAUTION: THE UNIFORM POROSITY OF THE POROUS PLATE IS VERY IMPORTANT TO PROPER COATING. DO NOT SCRAPE OR EVEN TOUCH IT WITH A HARD OR SHARP OBJECT. NEVER POINT AN AIR GUN DIRECTLY AT THE PLATE.

Clogging of the pores of the plate is the most common cause of failure. Once the Porous Plate has been removed, inspect it to determine which of the following reasons caused clogging:

- Leaving powder unused in the bed for an extended period of time during humid conditions.
- Oil or water in air supply system.
- Damage from scratching, gouging or denting the plate.
- Blowing compressed air directly at the surface of the plate.
- Correct the cause of plate failure and avoid conditions in the future which may have lead to it. Order a new Porous Plate and gasket material from ETI and carefully install.

Installation of Fluidized Bed Porous Plate

1. Remove all powder from the bed. Vacuum remaining powder using a soft brush fitting or rubber nozzle on the end of a vacuum hose.
2. Remove the hex head bolts from the bed flange and fluidizing chamber partitions.
3. Lift and remove the bed.
4. Remove old porous plate from flange and order a new porous plate from ETI.
5. Use old Porous Plate as a template to make mounting holes in the new Porous Plate.
6. Place new porous plate on flange (with gasket material as required) and reposition bed.
7. Reinstall hex-bolts to secure bed to base. Tighten bolts evenly to prevent air leakage around the edges of the porous plate.

SPARE PARTS

PART DESCRIPTION	ETI PART NO.	ASSEMBLY	QTY.	RECM'D SPARE
Porous Plate, Polymeric, 9 1/8" x 9 1/8" x 1/2" thick		Fluidized Bed	1	1
Gasket Material, 3/4" wide x 1/8" thick (required for Porous Plate flange)	6513018	"	A/R.	1 roll
ON/OFF Valve (Ball Valve), 1/4 NPT McMaster-Carr #4786K21		Pneumatic	1	-
Air Filter (Coalescing) Wilkerson #M00-02-000		"	1	-
Filter Element for Coalescing Filter Wilkerson #MTP-95-547		"	1	1
Air Regulator and Gauge	3018001	"	1	-
Needle Valve McMaster-Carr #4995K13		"	1	-

NOTE: Contact E.T.I. for current pricing on recommended Spare Parts.

WARRANTY

Electrostatic Technology, Inc. (hereinafter referred to as "Seller") warrants the goods furnished hereunder to be free from defects in material and workmanship under normal use and service, its obligations under this warranty being limited to the repair or replacement of any part or any parts thereof f.o.b. point of shipment, which shall fail on account of such defects within three months from the date work herein specified is completed by Seller provided that prompt notification is given the Seller of the defect. Defective parts are to be returned to Seller if Seller so requests. (Transportation charges for the return of defective parts to Seller and risk of loss thereof will be the Seller's responsibility only if the goods are returned in accordance with written shipping instructions from the Seller.) In the event that a serviceman from ETI is required, ETI will provide the replacement parts and a serviceman. Transportation, accommodations and meals for this serviceman would be to the account of the customer. The foregoing warranties are exclusive and are given and accepted in lieu of any and all other warranties, express or implied including without limitation the implied warranty of merchantability. There are no warranties which extend beyond a description of the goods set forth on the fact sheet hereof. The remedies of the Buyer for any breach of warranty shall be limited to those provided herein to the exclusion of any and all other remedies, including without limitation, incidental or consequential damages. No agreement varying or extending the foregoing warranties, remedies, or this limitation will be binding upon the Seller unless in writing and signed by a duly authorized officer of the Seller. In no case will the Seller accept charges for either removal or reinstallation of defective equipment.