



# THE SCREEN PRINTERS' NOTEBOOK

## Tetko Equipment

### **Tetko Tekair SCREEN DRYING CHAMBER**

Correct screen processing is the foundation of quality printing. Adequate stencil drying is a major function of many firms and may be the key for achieving high yield and low reject rates. After stencil application, the drying of the unexposed stencil becomes an important factor in regard to screen life, image definition and screen reclaimability.

If coated sensitized screens are not thoroughly dried, optimum performance of the screen and stencil cannot be realized. As the relative humidity or the moisture content of the stencil increases, the sensitivity decreases, hence increasing the necessary exposure time to thoroughly expose the stencil. If the exposure time is not compensated, the stencil becomes underexposed and greatly decreases its service life. Additionally, underexposed stencils contribute to the aggravating problem of "ghost images" after reclaiming.

The Tekair Screen Drying Chamber is designed to Tetko's specifications to meet the screen printing requirements of drying stencil screens before exposure. It is available in three sizes, each with five drawers. The steel cabinet is fully insulated and topped with a laminated surface suitable for use as an additional workspace.

### **Precise Air Temperature Control**

The Tekair Unit incorporates laminar air flow (uniform and one directional), produced by a continuous duty forced air blower, in conjunction with a thermostatically controlled heating element to provide a controlled atmosphere for drying. Unlike other cabinets used for similar purposes, the new Tekair technology incorporates air recirculation and active dust particle filtration. The air flows through a set of high performance "Microtrap" filters and scrubs it to provide increased drying efficiency throughout the



cabinet's interior. Air recirculation can reduce energy consumption while allowing the air to be repeatedly filtered, thus reducing screen degradation.

Each sliding drawer can accommodate several screens at a time or a single large screen.

The drawers ride on slides for easy movement, even when heavily loaded. Special drawer racks support the frames without damage to screens or stencils.

### **Design and Operating Advantages**

The sliding drawer design protects coated screens from physical damage and dust contamination, minimizes heat loss, and prevents light leakage. It should be noted that "fisheyes" and "pin-holes," due to dust contamination, make up approximately 85% of all screen related problems on the press.

Precise control of air temperature and laminar air flow assure rapid drying, proper stencil adhesion and hardening, thus save valuable production time, promote consistent quality and contribute to long screen life.

The electrical test probe terminal located on the control panel provides easy access and quick troubleshooting of contactors and other electrical components.

### **Application Benefits**

The Tekair Screen Drying Chamber incorporates all of the operating capabilities needed for:

- Increased productivity through efficient drying of unexposed stencils.
- Uniform exposure times from stencil-to-stencil due to uniform drying of stencils, for easier reclaiming.
- Less rejects due to dust contamination.
- Improved economy through time, labor, and energy savings.
- Better screen processing through closely controlled drying.
- Extended stencil life because the stencil is thoroughly dry.

The activities of any Screen-Making Department, particularly with critical quality requirements and high volume screen usage, can benefit from the improved productivity provided by the Tetko Tekair Screen Drying Chamber.

**Tetko Tekair**  
**SCREEN DRYING CHAMBER**



**DIGITAL DISPLAY CONTROL PANEL**

**TECHNICAL DATA**

Material all steel, insulated chamber with laminated tabletop

Specifications	Model 30 x 42	Model 55 x 58	Model 55 x 72
Maximum Housing O.D. Tabletop Dimensions (DxW)	35" x 78"	60" x 94"	60" x 108"
Height	40"	40"	40"
Maximum Frame Size O.D. (DxW)	30" x 42"	55" x 58"	55" x 72"
Maximum Drawer Size I.D. (DxW)	32 1/2" x 44"	57 1/2" x 60"	57 1/2" x 74"
Number of Drawers	5	5	5
Maximum Frame Profile Height	3.25"	3.25"	3.25"
Maximum Adjustable Temperature	130°F	130°F	130°F
Recommended Screen Processing Temperature	90° - 105°F	90° - 105°F	90° - 105°F
Electric Requirements	220V, 1-Phase 60 Cycles	220V, 1-Phase 60 Cycles	220V, 1-Phase 60 Cycles
External Main Fuse	30 amps slow	30 amps slow	30 amps slow
Net Weight	950 lbs.	1475 lbs.	1625 lbs.

Consult a professional electrician concerning local or state laws for specific electrical installations