

## H-6180 Tray Drier Demonstrator

### Purpose

The Hampden **Model H-6180** Tray Drier Demonstrator demonstrates the theoretical and practical aspects of drying solids in bulk.

### Specifications

#### Uniform Flow Tunnel:

12" square modular structure with air straighteners to insure a uniform flow and two psychrometer access ports.

#### Air Handler:

Axial flow fan rated approximately 400 CFM with variable DC motor drive.

#### Resistance Heater:

Heater shall be sized to provide approximately 200 °F to the drying compartment.

#### Drying Compartment:

This compartment shall be provided with a transparent access door. Mounted within the compartment shall be a balance arm and rack assembly capable of handling four drying trays.

#### Instrumentation:

Control panel with main AC current breaker and pilot indicator, air handler control switch with indicator and variable speed control, resistance heater control switch with indicator and variable adjust control, digital scale rated 4.5Kg x 0.001, differential pressure gauge, and one portable digital psychrometer -20 to 100 °C in 0.1% divisions dry bulb and 0 to 15°C depression below dry bulb temperature.

#### Mobile Carrier:

Structural square 2" tube with uniform flow tunnel base support, control panel support, cord storage bracket, four swivel casters with locks, and 10 ft. power cord.



**MODEL H-6180**

Dimensions: 60"H x 60"W x 24"D Weight: 600 lbs.

### Description

This unit consists of a uniform flow tunnel with a variable speed air handler, variable electric heater, drying compartment, instrumentation, and mobile carrier.

Experiments covered include drying test on solids for commercial and industrial use, effects of air velocity and temperature on the drying rate, drying rates, heat transfer analogy,

mass transfer analogy, mass and energy balances, and the use of instrumentation provided in the demonstrator.

A complete Operating Instruction, Bulletin 618-OI, is provided.

#### Input Power:

120V.AC -1Ø- 50/60Hz

All Hampden units are available for operation at any voltage or frequency

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