Food Technology Trainers

Educational Training Equipment for the 21st Century

Bulletin 641E

H-6410

Laboratory Pasteurizer

Purpose

The Hampden **Model H-6410** Laboratory Pasteurizer has been developed to investigate the pasteurizing process of low viscosity liquids such as milk and fruit juices.

Description

This system utilizes high temperature over a short duration of time processing up to 0.5 gpm.

This unit incorporates two basic modules, the control module and the pasteurizer module. The pasteurizer can be cleaned and disinfected at its bench location.

Specifications

Control Module

Enclosure:

14 gauge furniture stock steel finished in instrument tan texture.

Panel:

11 gauge furniture stock steel finished in instrument white enamel

Feet: Non-mar

Main:

Ground fault circuit interrupter, 20A Electromagnetic Circuit Protector Power Switch and Pilot Light:

Instrumentation

Nomenclature:

Temperature Controller:

Microprocessor-based P.I.D. controller

Digital Temperature Indicator: 4 digit 7 segment LED display programmable for °F or °C, æ1.6°F +1/2 LSD, resolution 0.1°F between -199.9° and 199.9°

and 1°F outside -200° and 200°F Temperature Selector Switch: 8-position Input: 3/c #12 power cable with plug

Silkscreen, black KEM enamel

Pasteurizer Module Panel:

14 gauge stainless steel with epoxy finish Thermocouples: Spring loaded Type T with stainless steel

thermowells, eight (8) Hot Water Tank: Polypropylene insulated

with safety cutout, drain valve, power controller thermocouple, and 1200 watt heating element

Hot Water Pump: Magnetic coupled, five gallon per minute

Cold Water Pump: Magnetic coupled, five gallon per minute

Process Pump: Self priming with 0.5 gpm Holding Tube:

Stainless steel with insulated cover Solenoid Valve:

Three-way with sanitary fittings

Heat Exchanger:

Stainless steel multi-plate consisting of two individual sections with insulated manifold ports with sanitary fittings

Accessories

Manual, Operating and Maintenance

Mechanical Requirements

Electrical: 120V AC, 1Ø, 60Hz, 20A Water: 45°F or below (Refrigeration is required) Refrigeration: For final cooling when chiller not used. Waste: Drain for cooling water



Options

H-6410A:

Chiller consisting of hermetic compressor, air cooled condenser, water to Freon evaporator, circulator pump, tank, evaporator pressure regulator and fittings

Computer Data Logging

This feature adds dual thermocouples and two flow transmitters into the system. One interface package containing National Instruments I/O modules is provided for interfacing into a PC computer through the USB port. Templates for LabVIEW® control software are included. Computer and National Instruments LabVIEW® Software are included.

Specify MODEL H-6410-CDL

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

