HEATED TUBE BATHS for OXIDATION STABILITY TESTING

- **Available for Any Oxidation or Heat Stability Test**
- **Heated Tubes Replace Aluminum Block and Oil Baths**
- **Each Position Individually Temperature Controlled**
- **Eliminates the Non-uniformity of Aluminum Blocks**
- **Eliminates Smoke and Fire Hazards of Oil Baths**
- **Light Weight vs Conventional Aluminum Blocks**
- **Rapid Heat Up and Cooldown**
- **Operating Temperature of 50° to 300°C**
- **Sample Temperature Stability of ± 0.1°C**
- **Oxygen or Air Flow Controller for Each Test Position**
- **Controllers May be Interfaced to a Windows Based PC**
- **Any Number of Positions from 1 to 100**

Also for Methods:

All Oxidation and Heat Stability Test Methods

The oxidation stability tube heating baths concept is similar to a heated aluminum block except that individual aluminum sleeves are used. Each sleeve is of a dimension to snugly fit a test tube of the specific test method requirements.

Each test position's sleeve is individually heated and controlled by a digital PID controller with test sample temperature stability of ±0.1°C. The operating temperature range of is from +50°C up to +300°C. The set point between any neighboring tube may differ by as much as ±40°C, thus allowing simultaneous tests at varying temperatures in the same apparatus. The digital controller has a resolution of 0.1°C.

The great advantage of the heated tube bath vs. aluminum block baths is the ability to individually offset displayed tube temperature vs. actual sample temperature. This eliminates the position to position sample temperature non-uniformity typical with heated aluminum block baths.

By using several different sized sleeves, several test methods may be conducted in the same apparatus.

Windows based software is available that displays each position's temperature, each position temperature off-set, gas flow rate (if a mass flow controller is selected), and time from the beginning of the test. The temperature control PID parameters for each individual position can be optimized from the PC for greater temperature stability.

▲ Model HT-342-2