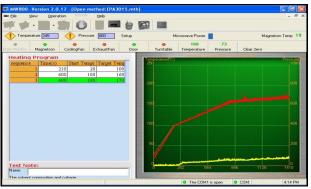
# **Software**

The Transform series is operated via an external computer. Its unique software interface provides simple, user-friendly control of the system sample preparation process.



Transform 800's Software Interface

## **User-Friendly Software Interface**

- Direct control and sensing of temperature
- Monitoring of pressure
- Real time graphic display of both temperature and
- Software interface screen allows operators to view the progress of the sample digestion temperature and pressure profile
- Automatic data storage
- Complete record of instrument parameters
- Can easily add or delete steps to an existing profile with one "click"

#### **Software Features**

- Flexibility to program individual methods for specific customizable sample preparation
- Automated recording of conditions during each diaestion
- · Window's-based software for real time control of temperature and pressure
- EPA methods and parameters pre-installed to ease various sample applications
- Unlimited storage capacity for methods

NOTE: Instrument specifications may change without notice as an ongoing effort of product improvement.

# **Applications & Methods**

Environmental

• Oil

Biological Wastewater Animal Tissues and fluids

Soil and Sludge

Agricultural

Botanicals

Food Industry Seafood Animal Byproducts

• Seeds Poultry

Pharmaceutical Drug Tablets

**Textile** • Cotton

Metallurgical

Minina Metals

Rocks and Minerals

Steels and Alloys

Clinical Electronic Blood

#### RoHS Regulations Urine

# **Standard Methods Compliance**

The transform series of digesters are compliant with various EPA methods and ASTM standards. The software comes with several EPA methods pre-stored for the operator's convenience. Any method can be loaded with a one "click" operation, to suit different types of sample preparation.

#### **U.S. EPA Methods**

#### EPA Method 3015

Microwave-Assisted Acid Digestion of Aqueous samples and Extracts

#### EPA Method 3051

Microwave-Assisted Acid Digestion of Sediments, Sludges, Soils and Oils

#### EPA Method 3052

Microwave-Assisted Acid Digestion Of Siliceous and Organically Based Matrices

#### **Regulatory Standards and Certification**

- RoHS and WEE compliant
- ISO 9001 Certified

#### **Authorized Distributor:**



Xing Da Trade Development (Hong Kong) Limited Tel: (852) 2207 4708; Fax: (852) 2207 4219 Email: info@xingdahk.com





**Total Solutions for Elemental Analysis** 









Environmental



**Transform Series** 

1001 East Pender Street Vancouver BC Canada V6A 1W2 Phone: 1.800.883.2918; 604-215-8700 • Fax: 604-215-9700 email: info@aurorabiomed.com • website: www.aurorabiomed.com

## **Excellent Quality for Reliable Results**

Aurora Instruments Ltd is an industry leader in the innovation, manufacturing and supply of high quality scientific instruments for the elemental analysis sector. We offer a full set of analytical solutions including Atomic Absorption Spectrometer (AAS), Atomic Fluorescence Spectrometer (AFS) and Microwave Digestion Systems (Transform Series).

Designed for closed vessel acid digestion, the Transform series of microwave digesters features top loading operation with high pressure capabilities that provide reproducible measurements, unparalleled safety, and ease of operation. These systems can be used to prepare samples for various analytical instruments such as AAS, AFS, Hg Analyzer, ICP-OES, and ICP-MS.

### **Benefits:**

- Decreases digestion time from hours to minutes (compared to conventional methods)
- · Reduces volatile element loss
- Prevents sample contamination from the environment
- Minimizes solvent consumption
- Allows unattended operation
- Offers high safety standards
- Enables online EPA methods

#### **Ease-of-Operation**

The Transform series is simple to install and operate. The vessel carousel and sensor are easily exchangeable when running a large batch of samples. The user-friendly software interface enables the operator to have full control over the microwave and easy access to methods.



Vessel carousel of the Transform 800 - removable from the inner chamber for easy installation and operation.

The Transform series offers the most advanced safety features. Our sophisticated technology protects the operator when dealing with high pressure and high temperature systems.

- Top-loading heavy duty automatic door with three level protection such that if the pressure reaches an unsafe level, pressure will be released at three different stages at the top of the door.
- 1. The spring loaded inner cavity of the lid will buffer the shock in the event of heightened pressure.
- 2. If pressure continues to build up, the excess pressure will be released from the digestion chamber.
- An additional reinforcement bar across the lid of the system secures the lid in place when pressure is released.
- Re-usable over pressure valves and rupture disks ensure a high level of safety for high-pressure situations
- Digestion vessels are molded with high quality engineered plastics with a maximum pressure of 3000 psi
- Continuous temperature and pressure monitoring and temperature control to produce more reliable results



Front view of the instrument





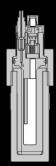
Top view of the Transform 800. Unique sensor vessel design allows for rapid change of vessels for higher throughput.



Liner



Vessel



Sensor Vessel Cross Section

Aurora's Transform series offers an automatic top-loading, closed vessel microwave digestion systems with high-pressure capabilities to enhance digestion quality while decreasing digestion time. These system are capable of simultaneously running up to 10 high-pressure closed vessels, providing a fast and automated method to digest even the most difficult samples. The Transform series provide optimal performance and reliable quality for sample preparation while leading the industry in safety.

#### **General Features**

- Heavy duty oven with top-loading automatic door
- · Round, pressure resistant, fluoropolymer coated stainless steel chamber
- Evenly distributed microwave field throughout the chamber ensures uniform heating of each sample vessel
- Integrated EPA protocols and methods directory

#### Transform 680

- Capacity for 6 high-pressure vessels capable of digesting at up to 400 psi working pressure and 250°C • Maximum allowed pressure 3000 psi
- Direct sensing and control of sample temperature
- This model is suitable for food, metallurgical and electronic applications among others

#### **Transform 800**

- Capacity for 10 high-pressure vessels capable of digesting at up to 800 psi working pressure and 250°C
- Maximum allowed pressure 3000 psi
- Monitoring of pressure and direct sensing and control of sample temperature in closed vessels to ensure reproducible digestion every time
- Digestion of petroleum and plastic application are best performed at higher pressures

## **Temperature and Pressure Control and Sensing**

- Improved pressure sensor technology provides the most accurate and highest pressure range possible. Combined with the temperature probe, this pressure sensor offers the maximum information and monitoring available
- Traditional temperature feedback control is achieved with a sealed thermocouple probe which enables fast and accurate temperature control and sensing
- Temperature control and pressure monitoring is based on a single reference vessel